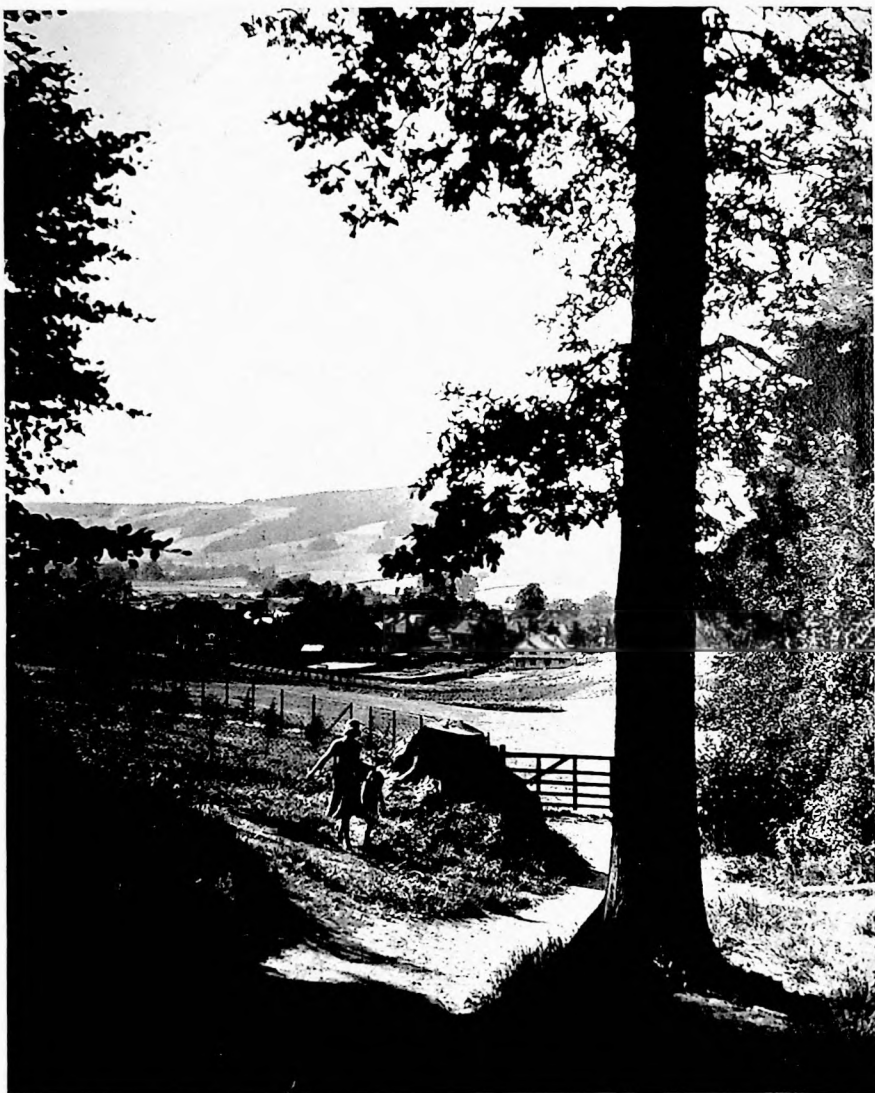


TOWN
AND COUNTRYSIDE



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TOWN AND COUNTRYSIDE

SOME ASPECTS OF URBAN AND
RURAL DEVELOPMENT

By THOMAS SHARP



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PREFACE

DURING the last ten years many hundreds of angry letters relating to the 'desecration of the countryside' have appeared in various sections of the Press. One or two angry books and pamphlets have also been written. It is a question which causes anger—at times of a despairing kind—to all who have any feeling for the beauty of rural England.

Anger has its uses. It can sting and shock the complacent into a knowledge of unpleasant realities. But it is not enough. There has got to be some consideration of how the realities can be made pleasant again. The part of this book which deals with the countryside attempts to formulate some of the principles which should guide rural developments so that the old beauty of the landscape may be preserved and fresh beauty created.

But if the spoliation of the countryside has aroused anger, the ruin of the town has given delight. For years now, town-planning and the building of 'garden-cities' have been the subjects of books, letters, articles, and speeches, all of which have regarded them with smug satisfaction. Yet this very town-planning is destroying at one and the same time both town and countryside.

The problems of town and country have been brought together into one book because they are largely inseparable. The preservation of the one depends on the preservation of the other: the preservation of both depends on the preservation of the antithesis between them.

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T. S.

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INTRODUCTION

Woe unto them that join house to house,
that lay field to field, till there be no place,
that they may be placed alone in the midst
of the earth!—ISAIAH v. 8.



CHAPTER I

THE POSITION

I. AS IT IS, AND WHY

THE last two decades have been remarkable for more catastrophes than the Great War and the depressed peace which we generally believe will constitute their chief claims to memory. It is as likely as not that they will in the future be as memorable for the damage they saw wrought on the English countryside as for those other more violent and personal tragedies. Those tragedies are still so close to us that to many it may seem intolerable to mention this other along with them. To us, personal distress and affliction may far outweigh the ruin of beauty. But the future is notoriously indifferent to the personal successes and sufferings of past generations. It judges that past by the legacy that it leaves. To-day the Victorian era is not so much memorable for its prosperity and Empire-building as it is for the legacy of sordid and ugly towns that it left us. We curse the blind callousness of the men who created those towns and we creep out of them into the country—which we, in our turn, destroy with an equal blindness. Regretting the beauty that *might* have been in the town, we destroy that which *is* in the country. We have suffered in war and in depression and we have destroyed beauty. And it would be well for us to realize that we are as likely to be remembered for the one as for the other.

As there have been other wars, there have been other periods when a deplorable state of public taste has brought wreck to some rural amenities. But as those other wars pale into insignificance beside the recent cataclysm, so the damage of those other periods dwindles in scale to the infinitesimal beside the gigantic havoc of the present.

No doubt there have always been various kinds of small sores and eruptions that have appeared on the face of the landscape to the discomfort of that highly conservative animal, Man: some mine in a hitherto pastoral country, some gash made in a hill-side to furnish stone for the rising cathedral, some brick-field or saw-mill or small workshop, some new cottage even, that suddenly changed, though slightly, the unchanging landscape. And no doubt men have always voiced their disapproval of the change. To Wordsworth, a hundred years ago, a mere handful of alien houses sprinkled among a dozen Lakeland valleys, during a period of fifty years, gave a natural cause for anxiety and hurt which he voiced in a vigorous protest. The cutting of a railway through a Pennine valley in 1871 stung Ruskin to a mighty

burst of eloquence. But how small do these things seem to us to-day who see spring up not a mere handful of alien houses in fifty years but a hundred thousand in one year, and not merely a few miles of railway but hundreds of miles of mechanized roads and electricity transmission systems that are even more destructive of beauty! Wordsworth's handful of alien houses were like an isolated, microscopic pimple that appeared on a remote part of the body of the country, hardly noticeable and showing little or no extension over a long period. Ruskin's railway was one of a number of scratches that time has largely healed. But the present ruin, which seems to have developed overnight, has so infected and corrupted the body of the country that it threatens to disfigure, for all time, the beauty that was once unique in the modern world. The thing may be the same: it may only be a matter of scale: but the small distresses of the past are so disproportionate to the ruin of the present, that we may justifiably regard the disease as a new one.

To-day it is practically impossible to pass an hour of unbroken joy in any but the remotest parts of the country. From dreary towns the broad, mechanical, noisy main roads run out between ribbons of tawdry houses, disorderly refreshment shacks and vile, untidy garages. The old trees and hedgerows that bordered them a few years ago have given place to concrete posts and avenues of telegraph poles, to hoardings and enamel advertisement signs. Over great areas there is no longer any country bordering the main roads: there is only a negative semi-suburbia. It is easier to see the country from a railway track than from them. The by-roads have suffered little less. They may indeed still offer an enchanting mile here and there; but the joy of it is wrecked by the fear of some horror that must be lurking round the corner. There seems no valley or hill-side that is not despoiled by some shameless blot. Gigantic pylons stride over the counties, like the mechanical Martians of Mr. H. G. Wells's *War of the Worlds*. Commons, moors, woods, hedgerows are littered with refuse. Everywhere one expects ugliness, incongruity, and disorder. If one comes to a village or a view whereon the modern blight has not yet descended, one holds one's breath and with a desperate effort attempts to fix the scene in mind, certain that one will not see it again. To know a quiet, unspoiled place is to hold a quivering secret in one's heart. One whisper, and men will descend upon it and utterly destroy it. Thus even the pleasure of what remains is destroyed by the uncertainty of how long it will remain.

How is it that we have come to this pass? Why is it that this English landscape, which is the most humanized in the world, which has taken its present character through centuries of conscious human moulding,

should seem no longer able to absorb into itself those human activities which once brought it into unrivalled loveliness? The open spaces are still wide enough, and we are still far enough away from over-population, for a vast amount of human handiwork to be absorbed by the country without its losing its character as country—if the handiwork is of a kind that can be absorbed, that has some sympathy for the background upon which it is placed. But it has not. That is precisely the difficulty. The present human activities in the countryside are undertaken in a spirit as far removed from sympathy as they possibly could be. In the simplest diagnosis the present damage results from 'bad taste' or, put in another way, from the indifference to Landscape Design—though to this cause should be added a condition far more inexcusable, one that is a far more disgracing indictment on our civilization, namely, mere dirtiness and slatternliness.

But in so intensely urban a civilization as ours (four-fifths of our population being town dwellers), this indifference to Landscape Design could not have the widespread results that it has had, did not certain conditions exist which both necessitate and facilitate increased human activity in the countryside. These conditions are, (1) the failure of Civic or Urban Design and the consequent desire of urban populations to escape from the results of that failure, and (2) the establishment of new methods of transport which make that escape possible.

It would be interesting to speculate as to how far architectural urbanity might have developed in England if the feverish hurry and blindness of material success in the Victorian period had not crushed it out of existence. We excuse ourselves for our ugly towns by saying that we are not, as other people are, town dwellers at heart, that we have always settled in towns only for necessity's sake and have kept our eyes and hearts for the country. It may indeed be so: but it is more than likely that had not the industrial revolution blinded our eyes to all beauty, the urbanity that expressed itself in the building of the new Edinburgh, in Bath, in corners of Buxton and elsewhere, in Nash's Regent Street and in the gracious Georgian buildings of a hundred country towns, would have continued to express itself in the building of the new towns that were rushed up as the industrial revolution enveloped us. However that may be, what the industrial revolution did bring us was not the expression of Civic Design or any design at all. Architectural design itself was at the lowest ebb. But there was worse. Formless masses of closely packed streets were tacked on to old towns without any regard for civic amenities or necessities. If an old lane ran through the area to be developed, there, fortunately, was the line of a traffic route; but no new road was ever planned as such;

there were merely streets that provided access to the houses. The disposition of public buildings, the dramatic interest of open places, the creation of 'street pictures', the embellishment of roads by tree planting, these and all other methods of making a town habitable and dignified were forgotten or neglected. Factories and houses crowded together into one drab and inconvenient mass. So London grew enormous, and Liverpool, Birmingham, Manchester, Sheffield, and Leeds attained the bulk of which they are so unjustly proud. And so hundreds of other towns, of various shapes and sizes, grew out of old villages or sprang up from virgin fields.

This was the failure of Civic Design. The towns had been built and there was no beauty in them. Still, in most parts of the country they were compact, even if they were shapeless; and as yet ugliness was practically confined to them. Practically, but not entirely. In some districts, particularly in the industrial north, the damage to the countryside had also begun. In the narrow Lancashire and Yorkshire valleys, where the early mills had been established, a new sort of 'ribbon' town straggled in a thin line along the valley bottoms, avoiding the inhospitable slopes of the enclosing hill-sides. In the mining districts, especially in Durham and South Wales, small villages sprawled out along the roadsides in the shadows of great, burning pit-heaps and by the sides of streams that had been incredibly fouled. The damage, however, was limited to those areas where geological exploitation was carried on, or where the conformation of the ground did not allow of a compact grouping. Generally speaking, the town still kept itself to itself. Civic Design had died, and its very existence had dropped out of memory. But the country was still rural.

It was so by the purest accident, of course. Bad taste and the indifference to Landscape Design were no less prevalent then than they are now. It was only the opportunity for displaying them in the countryside that was lacking. The country was still comparatively inaccessible. If a few tramway systems ran through the open areas between neighbouring manufacturing towns, they provided practically the only facilities there were for road travel. People travelled solely by the railways; and so the only areas available for easy destruction were those few small localities within the immediate influence of a railway station.

Then, after some fifty years of this artless, uncivil town building and town extension, there began to dawn with the new century a realization that the towns had been built badly, that they were insanitary, inconvenient, ugly, and cheerless. A revolt set in. The idea of building 'garden-cities' fired the public imagination. People had lived too long in dreary streets. They had seen too few trees and too little

grass in their sordid towns. They were tired of their squalid paved back-yards. They wanted gardens of their own, back and front, with a space between their house and the next. They wanted, in short, to bring the country into the town. Their towns were so bad that the idea of any town being beautiful, *as a town*, seemed fantastic. They did not cry out for civic art as the expression of their urban life. No town could be good of itself: they would mitigate its inevitable brutality by stealing leaven from the countryside.

So the new suburbs began to be built, still clinging because they must, though they clung more and more loosely, to the towns. So there was passed in 1909, to the expectant joy of the pioneers of social reform, the first English Town Planning Act. That Act might have revived Civic Design. But it did not. It consigned it finally to oblivion: and, instead, it consolidated the idea of the 'garden-city', of the garden back-front-and-side. Houses must not now be built in continuous streets: they were to be in little blocks of two or four, and they were to be set away back from the boundary of the road, 20, 30, or 50 feet. The town was to be no longer a town, but a loose collection of country cottages; and the looser and the more countrified, the better.

This was the position at the beginning of the War and at the dawn of the Motor Age. Civic Design and architectural urbanity had been killed stone dead by the joint efforts of Victorian industrialism and romanticism. The greatest period of town building and town extension in the history of the world had created not towns at all, but great dreary slabs of building which so shocked and sickened later generations that the idea of a town's being an individual thing of beauty and order was completely lost. Civic expression was almost entirely discredited. The trek from dreary streets to countrified suburbs began. The tragedy of the town was complete. The stage was set for the tragedy of the countryside.

When the War ended, a number of important things had happened. The building of houses had been almost entirely suspended for five years and there was an enormous deficit in housing accommodation to be made good. Men came back to sedentary and factory life reluctantly. They had been in the 'open' for years: now they wanted to *live* in the 'open', in the country: they were indeed promised 'homes fit for heroes to live in', which meant houses with a garden back-front-and-side. In the reaction to the discipline of war time, restraint broke down and tradition was flung aside. New things were wanted for the new world, even if the new thing was only a bungalow instead of a two-storied house or a shack on a common instead of a town tenement. There was an atmosphere of idealism abroad—but a dangerous, uncertain

idealism, tinged with cynicism and brutality: a utilitarian idealism that cared nothing for beauty or order.

To all these conditions was added the great revolution in transport. Where, a few years before, the country had been accessible only from a few points along widely-spaced railway lines, it was now accessible from every point along an intricate, closely woven net of hundreds of thousands of miles of main roads and by-lanes which were available for all manner of quick-moving, private and public, passenger-carrying motor vehicles. Large areas of it were also newly opened up for exploitation on the estates of the great landowners who could no longer maintain them on account of a crippling taxation. These landowners had generally exercised a beneficent guardianship over the beauty and character of the countryside. Now they were forced to abdicate and there was none to replace them. And a still further mechanical advancement, the popularization of the radio, which made available in the remotest part of the country amenities that had hitherto been available only in the larger towns, still further assisted in the breakdown of town life.

Thus, when the housing deficit came to be made up, the two conditions mentioned above, as both necessitating and facilitating increased human activity on the countryside, were existing. Civic or Urban Design had failed, urban populations were seeking to escape from the results of that failure, and the establishment of new methods of transport was making possible that escape. But, of course, a compromise was necessary. The greater proportion of the population that was now to be housed could not completely cut adrift from the towns. Men earned their livelihood there. Women did their shopping there. So they got as far out as they conveniently could, clinging to and stringing out along the bus routes, and holding firmly to the now universal garden-ideal (which had been still farther strengthened by the desirability of having a garage, or space for a garage, attached to each house). Even where, as in most municipal housing schemes, grouped suburbs were still built, the ideal of the semi-detached country cottage and of countrified roads was equally established. And so there were created those negative, de-urbanized town fringes and the long thin ribbons of demi-semi-suburban development that run far out into the country, carrying havoc with them.

In addition to this fixed population that drifted out of the towns to live 'in the country', motor transport created a liquid, fluctuating, week-end-and-fine-evening population that moved over all parts of the country and that had to be catered for, man and machine, by refreshment places, garages, petrol filling stations, telephone boxes,

and other accommodations. This week-end-and-fine-evening population represented a great purchasing public. So the shopkeepers and manufacturers followed it out into the country and touted for its custom through hoardings and advertisement signs. It represented also a far greater population than the roads could safely or conveniently accommodate. So the old roads must be widened and improved and new roads must be built.

These were the urban activities. There were also some abnormal rural developments. The housing deficit in village and hamlet had to be made up. Tradition had died. The ancient guardians of the village had gone. How then should it be made up but by housing schemes that were identical with those of the town suburbs? Under a plea that electricity was to be brought to village and farm, great electricity transmission schemes were carried out. And then there were new types of farming. The excellent small-holdings idea was put into practice; and each small-holder must live separately on his holding. So identical detached or semi-detached villa-cottages sprang up at identical distances along the roadsides. So the poultry-farmer patterned his fields with scores of new and elaborate wooden chicken-houses till they looked like allotment gardens, and the pig-breeder did likewise with his new and elaborate piggeries, with like effect.

2. AS IT WILL BE

Thus we have reached the position of to-day.

What of the future? The work of the last ten years confronts us with this ruin. What of the next?

It will be the same. All these activities are likely to be intensified and to continue as long as the present set of 'ideals' continues. Even now the housing deficit of the War period is far from being made up, and over and above this there is the post-War increase of population to accommodate. Emulating Russia, local authorities are adopting ambitious Five-Year Plans of housing. (It was estimated in 1925 that, between then and 1940, 2,500,000 new houses would be required, *for the working classes*: to which must be added the requirements of the rest of the population.) And when, if ever, the normal pre-War equilibrium of supply and demand is attained, there will still be continued housing activity. Even if the population becomes stabilized, as it promises to do, there is bound in the middle future to be a gradual rehousing of the population that is now living in the slums and dreary streets of our Victorian towns. It is impossible to estimate the extent of this rehousing, but it is safe to say that it will affect some hundreds of thousands of people per annum. The firmly-ingrained ideal of the

majority of these people is the semi-detached, garden-surrounded house situated 'in the country' but on some main route of communication to a town, and this ideal is likely to be consolidated by further mechanical progress. The perfecting of television, for instance, adding to the 'home amenities' already provided by radio, will further undermine the social domination of the town. The speeding up and cheapening of transport, especially around the large cities, will have a very far-reaching effect. The ordinary man cannot now afford to live more than some eight or ten miles away from the scene of his daily labours, for suburban traffic still moves at a rate of less than twenty miles an hour. But if train speeds are increased by the wholesale electrification of the railways, as is at present proposed, the range of the suburbs will be correspondingly extended. The closing in of the net of bus routes will have a similar result, and the wide use of a conveyance like the recently invented 'rail-car', which, by the action of a single lever, can be made suitable for running on either road or railway, may have the effect of bringing the whole countryside to the very doorstep of the towns. And as for the development of popular air-transport—if ever that happens and if 'wings come to the aid of wheels'—then truly all England will be suburban to London and all Scotland to Edinburgh and Glasgow.

The week-end-and-fine-evening population of the countryside is also bound to increase as motor-cars become cheaper and more numerous. In the number of motor vehicles in proportion to population, England still lags far behind some other countries: in 1928, for instance, the number of persons per private car was between five and six in America and over thirty in Great Britain! It may be questioned whether in these figures we shall ever reach so high a proportion as exists in America, where geographical and economic considerations are particularly favourable to such a state of affairs, but, nevertheless, it can reasonably be expected that in a few years motor traffic in England will have been considerably multiplied. This increased road traffic, with its moving population, will require increased services in further refreshment places, garages, petrol stations, and telephone boxes; and it will present an increased possible market to shopkeepers and manufacturers, who will follow it out into the country with increased hoardings and advertisements. It will also demand increasingly wide and more numerous roads.

Factories, too, freed by the development of road transport from their old dependence on the railways, and provided, even in remote rural areas, with a dependable supply of electrical power, may migrate to the country, taking their labour along with them. Air services will

require aerodromes (which may be covered with concrete) and emergency landing grounds (at every five or ten miles along the main air routes). Air-travellers will attract the advertising salesman, and the roofs of buildings, hill-sides, and level fields will help him to proclaim his wares. And in addition to all these urban and pseudo-urban activities, rural developments through small-holdings and poultry-farming, and through the introduction of new methods of agriculture, will be intensified and will do their part also in the inevitable changing of the appearance of the countryside.

That is the position we have come to, and this is the still worse position we are likely to come to if the blind, unintelligent and unprincipled developments that have brought us here are to be allowed to continue unchecked.

Tradition has broken down. Taste is utterly debased. There is no enlightened guidance or correction from authority. The town, long since degraded, is now being annihilated by a flabby, shoddy, romantic nature-worship. That romantic nature-worship is destroying also the object of its adoration, the countryside. Both are being destroyed. The one age-long certainty, the antithesis of town and country, is already breaking down. Two diametrically opposed, dramatically contrasting, inevitable types of beauty are being displaced by one drab, revolting neutrality. Rural influences neutralize the town. Urban influences neutralize the country. In a few years all will be neutrality. The strong, masculine virility of the town; the softer beauty, the richness, the fruitfulness of that mother of men, the countryside, will be debased into one sterile, hermaphroditic beastliness.

The crying need of the moment is the re-establishment of the ancient antithesis. The town is town: the country is country: black and white: male and female. Only in the preservation of these distinctions is there any salvation: only through the preservation of the town as town can the countryside be saved; and only through the limitation of rurality to the country can the town be preserved.

It is time to study and analyse those principles of Landscape Design, whether conscious or instinctive, by which the English countryside was endowed with the character it had before the present deluge. It is beyond all doubt time to attempt a revaluation of the principles of that 'Town Planning' which has recently masqueraded as Civic Design.

PART ONE
THE COUNTRYSIDE

But, in truth, no one can now travel through the more frequented tracts, without being offended, at almost every turn, by an introduction of discordant objects, disturbing that peaceful harmony of form and colour, which had been through a long lapse of ages most happily preserved.—WORDSWORTH, *Guide to the Lakes*.

This is, indeed, the main point; for, much as these scenes have been injured by what has been taken from them—buildings, trees and woods, either through negligence, necessity, avarice, or caprice—it is not the removals, but the harsh *additions* that have been made, which are the worst grievance—a standing and unavoidable annoyance.—WORDSWORTH, *Ibid*.

The sun had drawn landscapes for you . . . in green and blue and all imaginable colours, here in England. Not one of you even looked at them then; not one of you cares for the loss of them now, when you have shut the sun out with smoke. There was a rocky valley between Buxton and Bakewell, once upon a time, divine as the vale of Tempe; you might have seen the gods there, morning and evening—Apollo and all the sweet Muses of the Light, walking in fair procession on the lawns of it, and to and fro among the pinnacles of its crags. You cared neither for gods nor grass but for cash. . . . You enterprised a railroad through the valley, you blasted its rocks away, heaped thousands of tons of shale into its lovely stream. The valley is gone, and the gods with it; and now every fool in Buxton can be at Bakewell in half an hour and every fool in Bakewell in Buxton; which you think is a lucrative process of exchange, you Fools, everywhere!—RUSKIN, *Fors Clavigera*.

CHAPTER II

THE NATURAL LANDSCAPE

I. THE INDIVIDUALITY OF THE ENGLISH SCENE

ENGLAND is a country of gently undulating landscapes, of green pastures and brown ploughlands where occasionally bare downs and moorlands break into softer scenes, but where, almost always, rounded trees and hedgerows continually abound, where quiet waters flow in a thousand rivers and streams, where soft changing skies give ever-varying beauty to friendly distances that are broken and enriched by

‘Hamlets brown and dim-discover’d spires’.

It is a country whose loveliness has long been a delight to native-born poet and peasant, and a source of envy to the rest of the world.

Its landscape is unique among all landscapes. Other landscapes are humanized like it; but none has its friendliness, none its satisfying quality of security. Others are merely the outward settings of human life, the theatres of man’s age-old struggle for existence, the incidental scenes of economic activity. Even where they have been humanized for thousands of years they still are terrifying though tamed, still unfriendly though familiarized. They have not yet been brought to any satisfying human relationship. They may have beauty but it is of a stark, oppressive quality. Man lives and works there as an infinitesimally small creature in a vast unbounded space. The scale of those landscapes is cruelly destructive of man’s comfortable self-esteem: reductive of his stature. In England the terrifying scale of Nature has been reduced. The landscape, though it is still the theatre of man’s struggle for existence, has had its distances brought within man’s easy comprehension and is comfortable and friendly. It is the scene of economic activity, but it has been given a deeper relationship than that. It has been moulded like a work of art: it has been given a pattern and a rhythm: it has been made beautiful through a definite artistic impulse. It is the loveliest, the most humanized of all landscapes.

And yet the average Englishman, the inheritor of this landscape, is unaware of any difference between his own and the universal natural scene. Even he who has travelled abroad and is aware of the difference rarely attempts to account for it, and places but little value upon it. He is content to accept it casually: to regard it as a pleasant thing that has just happened, one of the pleasant things naturally created from the beginning as a special favour for a chosen race. Hedges

and trees were created there, in their happy positions, like hills and streams. And having just happened, the English scene will either look after itself (and, being English, will naturally retain its beauty and individuality) or it will be specially cared for by the benign and favouring God who made it.

A dangerous philosophy, as every year makes more obvious.

2. HISTORICAL SKETCH OF ITS DEVELOPMENT

The benign and favouring God who made it: that, really, is the modern conception. 'God made the country, and man made the town', exclaimed the gentle Cowper in what is surely one of the most foolish lines in the whole body of English poetry. And 'God made the country and man made the town' has been the watchword that during the last century has led to the destruction of both.

The God-made country! And the English country at that! The country that God made was primeval forest, swamp, jungle, prairie, and desolate moor: gigantic, wild, and terrible. There is little of it left in any civilized part of the world to-day: there is hardly a square mile of it remaining in England. The forests are felled, the prairies subdued, the swamps drained; the vast reclaimed open spaces are parcelled out into small man-made fields that are bordered with man-planted hedges and diversified with man-sown trees: the mountain sides are cleared of rocks, are veined with stone walls and dotted with human habitations: the moors are intersected by roads—and crossed by electricity transmission pylons and wires. Everywhere the wild natural scene has been touched and tamed by human activity.

The story of civilization itself, indeed, is the story of man's subjugation of the country that God made, of his sophistication of that 'wilderness grotesque and wild' that was the primeval landscape. It is so everywhere. It is especially so in England. Man made the country and man made the town; and it was the same few generations of men (Cowper's own generation being by far the most active) that brought both of them, in England, to their highest degree of beauty and order. Particularly was it Cowper's own generation that gave the English countryside its striking individuality.

The history of the evolution of the natural scene throughout Europe from primeval forest and swamp to its present condition is the history of the rise, decay, and supersession of the elaborate agricultural economy known as the 'common-field system'. The history of the evolved individuality of the English scene begins in comparatively recent time, and that individuality results almost solely from the distinct and separate line which the supersession of the

ancient agricultural system took in this country, and from the blessed accident of an artistic impulse that occurred at the moment of supersession. Perhaps to speak of the 'moment' of supersession is to dramatize the story rather inaccurately. Long before the final abandonment of the common fields in the eighteenth and early nineteenth centuries there had been a gradual decay of the old system and a slow tendency towards the form of agriculture which we now know. But this slow change had affected but a comparatively small area of the country, and, despite the long-foreshadowed tendency, the change-over was in fact sudden and decisive throughout the greater part of England.

The common-field system had been chiefly Saxon in its origins. Before its establishment Briton and Roman had played their part in the development of the landscape from the primeval wild. The Briton had cleared patches of forest, had developed primitive trackways which yet survive, had founded settlements which were the foundations of some of our modern towns, had left monuments which still dominate their surrounding landscapes. The Roman had added to all this. He built his magnificent roads that still drive boldly up hill and down dale carrying a traffic undreamed of by their creators. He built forts and camps and that great wall that still strides the Northumbrian moorlands. He colonized the countryside with his villas and brought a settled and scientific agricultural system that changed the appearance of the old cleared forest areas. It was he that first employed, for the enclosure of land, those hawthorn hedges that are now the commonest feature of the countryside (though he employed them to a very limited extent only, about the gardens of his villas). But it was the Saxon who exerted by far the most powerful influence in all the early landscape development. It was his manor and common-field system of agriculture that determined and kept more or less fixed for a thousand years (except in so far as it changed by the clearance of the forest and the taming of the waste) the appearance of the English countryside.

Early Saxon England was still only slightly removed from the wild. Vast forests covered most of the land, occasionally varied by brown marshes and peat bogs encircling great shallow fens, or by a few bare uplands standing above the tangled wilderness. Here and there the monotony of the landscape was broken by an open clearing where crouched a little mud and wattle village. Next to the village, or sometimes at a slight distance by the banks of a stream, were the common meadows, and right around stretched the hedgeless expanse of the three common arable fields that were cropped year after year in an

unvarying succession of compulsory rotations. Beyond this ranged the common pasture; and then, encircling all, the forest, thinned at first where great herds of swine rummaged for mast, then thick, black, and impenetrable. No isolated farms and few towns broke upon the scene; there were only the small villages that were completely isolated and shut away, where little communities worked in common and lived and died with so little movement that even the great Roman roads were absorbed again into the forest.

Infinitely slowly through the static centuries, the clearance of the forest progressed as the population increased, until, by the time of the Norman Conquest, parts of the south, at least, had reached a remarkably full stage of development. If the Domesday Book is to be believed, there were counties where in 1086 the amount of arable land was far in excess of what it is to-day, in some instances two or three times as much. Certainly by this time the villages were no longer so isolated: sometimes they were so close together that a pasture ground was common to two or more villages. But still most of the country, and practically all of the north, was in its primeval state.

The Anglo-Saxon had raised a few stone-built churches. One or two, humble and earthy, remain to us. Nothing remains of his houses. He built temporarily: he was still close to the earth, still subdued to Nature. But now the Norman inaugurated a new attitude towards the natural scene. He was not content to be a humble part of it. Partly out of necessity and partly out of his defiant nature, he entered into competition with, and dominated, the normal landscape. Castle and cathedral rose on the hill-top, above the forest, subduing it. The Saxon had modified the scene by altering natural conditions: the Norman began the dangerous business of dominating it with artificial forms.

But if he founded a new building tradition he perpetuated the old agricultural system, altering it only to the extent that where the village had been a free co-operative community, it now became a bonded slavish instrument for the profit of the manor. So for centuries the clearance of the forest slowly went forward and the open-field cultivation continued; and except for the slow reduction of the waste the appearance of the country remained the same. Everywhere in the cultivated areas there was a remarkable preponderance of arable land, and hardly anywhere were there any permanent enclosures, save for a few around the gardens or orchards of the villages or the paddocks where the young stocks were kept.

The first slight departures from the system began towards the end

of the thirteenth century. In 1235 the Statute of Merton asserted the lord of the manor's proprietary interest in the common waste and some fifty years later another statute, that of Westminster the Second, gave him power to enclose the common lands against his tenants. These powers were to be invoked long afterwards to strengthen claims for inclosure, but they can have been little used at the time, for it is certain that the change in the agricultural system which their use would have entailed did not occur for several centuries. Probably the most they did at the time was to furnish the lord with a deer park and perhaps occasionally with an enclosed farm which operated side by side with the common fields.

The first real departure came with the Black Death, a century later. When that scourge had carried off half the population of the country it was natural that it should affect the question of labour. But while it reduced the number of their labourers it increased the size of the landowners' estates. Because of these things, and encouraged by the growing demand from the towns and from foreign markets for wool, the landowners began to reduce much of their arable area to pasture. With these factors set in the beginning of the decay of the old agricultural system, and something still far removed from, but yet akin to, the present English scene began faintly and very slowly to emerge in some districts of the country.

Despite these changes, however, a great part of England was still in an unredeemed primeval state. In the fifteenth century an unbroken series of woods and fens stretched northwards across England between Lincoln and the Mersey. The great eastern fen covered hundreds of thousands of acres; north and west of it extended great areas of bog and swamp. Yorkshire was swamp, heath, forest, and bare moorland. Lancashire was largely marsh and peat moss. Warwickshire, Northamptonshire, and Leicestershire were covered with forest. Sherwood Forest covered nearly the whole of Notts.; much of Sussex was still the forest of Andredsweald; Cannock Chase was covered with oaks; the Chiltern district of Buckingham and Oxford was thick with woods¹—and so on over most of the country. In some counties there were now great areas of clearings; but where the landscape was not waste and wild it was quite open, was scrubby and patchy in effect, and must have had something of the appearance of a vast area of modern allotment gardens.

Slowly the process of breaking down the open field system continued throughout the Tudor period. In the reigns of Henry VIII and Edward VI, particularly, commons and common fields disappeared

¹ Curtler, *History of Agriculture*.

in many places; and the country saw the first notable instalment of 'inclosure'. It saw also an increasing conversion of arable land to pasture. The writings of the times are full of complaints of injustice resulting from the one and hardship from the other. 'Where there have been many householders and inhabitants, there is now but a shepherd and his dog', said Bishop Latimer. And later, in 1540, 'such store is there of cattle in every place that the fourth part of the land is scarcely manured for grain', wrote Harrison. Even the statutes and royal commissions of the times reflect the changing conditions of the countryside. There were laws passed limiting the possessions of one person in sheep, against the conversion of arable land into pasture, against the pulling down of farmhouses; all of which, and others, were generally evaded, for despite pious official and unofficial expressions of concern, the instruments which made the changes possible, the Statutes of Merton and Westminster the Second, were confirmed and re-enacted.

But though inclosure was now definitely going forward, its extent was probably much exaggerated in contemporary writings. From the evidence of later years it is obvious that the greater part of the agricultural land of this time was cultivated on the common-field system, and that it was so cultivated for another couple of centuries. It has been estimated that from the middle of the fifteenth century to the beginning of the seventeenth the areas inclosed amounted only to some 2 per cent. of the total area of England; and, moreover, what inclosures were made were from waste lands and not from the open fields. And further, when inclosure did take place, it did not necessarily mean *enclosure* into fields by hedges (though it sometimes did), but rather absorption into large and undivided properties which often became the decorative country estates of prosperous merchants and wealthy townspeople.

During all this time the waste lands were shrinking. In the fifteenth, sixteenth, and early seventeenth centuries the clearance of the forest must have proceeded with rapidity, and in the later Tudor and early Stuart reigns particularly it seems to have been pursued vigorously. By the middle of the seventeenth century the destruction of timber had reached such alarming proportions, not only through forest clearance but because of its use for ordinary fuel and for the furnaces of glass and iron factories and the like, that a general concern began to be felt that soon even the existence of the British Navy would be imperilled by the scarcity of 'hearts of oak'. The man most keenly aware of the danger and the one who did most to avoid it was John Evelyn, whose fame as a diarist has somewhat obscured his other



THE NATURAL LANDSCAPE

several claims to remembrance. In 1664 he published his *Sylva*, a book which was 'a trumpet note of alarm to the nation on the condition of their woods and forests', and which 'weaned the sporting and gormandizing gallants from the courts of the Merrie Monarch to the pastime of sowing the seeds of future navies'. Evelyn omitted no argument which might encourage his countrymen to practise arboriculture. Besides appealing to their patriotic feelings and their commercial instincts he appealed to their charity by demonstrating how the poor might benefit by planting on waste lands, and to their artistic sense by beseeching 'Noble Persons to adorn their goodly Mansions and Desmesnes with trees of venerable shade'. And he did so with such success that he could afterwards claim that he had induced landowners to plant many millions of trees. Evelyn must be regarded as the father of the modern English landscape. His *Sylva* ran through many editions and was for generations the inspiration of his countrymen, leading them towards a general practice of planting and rural adornment. Whereas hitherto the countryside had been merely the outward setting of human life, the incidental scene of economic activity, from now onwards it was regarded also in the light of a pictorial composition whereon each man, working with nature's own materials, might produce a scene of beauty for his own glory and his descendants' future delight. It was a genuine artistic impulse. Here in England it was sought to create in fact the ideal landscapes that Claude and Salvator Rosa had painted on canvas. And from here the English landscape dates its departure from the universal and the beginnings of its individuality.

Throughout this time inclosure on a small scale had continued. There had been armed resistance against it at the beginning of the seventeenth century, and a number of Acts were directed against it; but still it went on. The reclamation of the waste also continued, particularly in the Fen district where 100,000 acres or more were drained and brought into cultivation. But yet at the end of the century these things had advanced so little that still less than half of the total area of the land was cultivated, and of this at least three-fifths was in the old open common fields.

But now it was obvious that the common-field system had fallen out of gear and was hopelessly inefficient for the production of food for the rapidly increasing population of the towns and the countryside. Individuals held their land in narrow strips scattered wildly over all parts of a parish. The soil itself was sadly impoverished by the centuries of ploughing in the same direction which the narrowness of the various holdings had entailed. And in a score of other ways the

thousand-year-old system showed itself to be outworn. Its final abandonment and the wholesale inclosure and redistribution of the land had become inevitable.

The old inclosure machinery was out of date and inadequate for the extensive change that was now necessary. Fresh parliamentary power was therefore resorted to and in 1709 the first of the modern

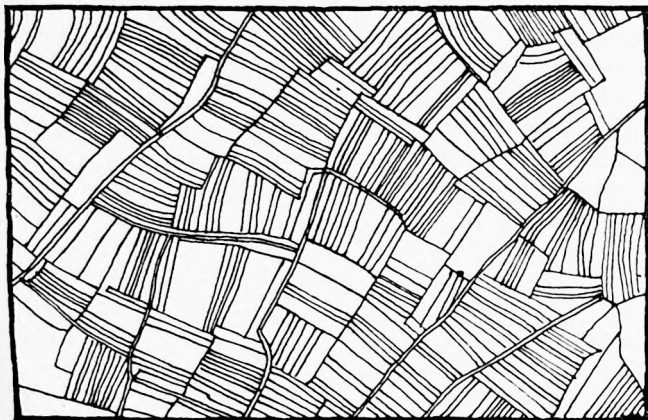


FIG. 1. Sketch plan of part of parish of Much Wymondley, Herts., as it existed in 1803, showing remains of the 'open-field system': drawn from a plan in Seeborn's *English Village Community*.

Inclosure Acts became law. At first the facilities it afforded were but little used and not until the middle of the century did the inclosure schemes promoted under it reach an average annual number of double figures. But then there came a sudden impetus, and in the twenty years between 1765 and 1785 there was an average of nearly 50 schemes per year: a total of nearly 1,000 schemes each covering considerable areas of land and often involving the complete redistribution of entire parishes.

In the eighteenth century something over 3,000,000 acres of land were inclosed under parliamentary powers (there was, besides, a great, though inestimable, amount of enclosure and consolidation of properties through private treaties). This inclosure was almost wholly from the common arable fields. It was, therefore, these more than any other inclosures that changed the appearance of the English scene.

The work entailed in the business of inclosure must have been of extraordinary intricacy. First of all it was necessary for surveyors to measure and value every one of the innumerable little properties involved. Then the whole of the inclosure area was pieced out so that

each holder received his proportionate share, with, as far as possible, each new holding laid out contiguous with the old homestead. This often entailed a complete remodelling of the public road-system, for while it was desirable that each holding should be compact and unsevered by the roads it was also necessary that it should have direct access to them. Hitherto the highways had been unfenced and unfixed: rights of passage, only, which might deviate and alter to avoid obstacles and bad impassable patches. Now they became fixed, narrow, fenced strips which had to be fitted into the general pattern of the redistributed plots. And so the winding, sharp-turning, and apparently erratic English country roads are not the result purely of ancient purposelessness and blind chance, but are part of, and arose from, the individual development of English agriculture.

In the allocation of the new properties, the practice was generally followed of so tracing the lines of the fences as to form square inclosures. Each property was compulsorily enclosed by a fence which was almost invariably a quick hedge standing on a little ditched bank, in the lowland country, or a stone wall in the hill country. The cost of 'public' fences alongside the roads, &c., was borne out of the general inclosure fund, which was assessed on each allotment in proportion to its size; and the cost of the 'boundary' fences between the allotments was apportioned against the different affected owners. This enclosing by fences was one of the greatest expenses through the whole of the inclosure movement: on the average it amounted to about £1 an acre (exclusive of the interior fencing within each allotment, which was the affair of the owner). It might easily have been dispensed with in the arable areas and have been replaced by some cheaper and less permanent form where inclosure was indispensable. Then the English countryside would have been the universal countryside. But it persisted. It persisted not only for boundary definition within the inclosure schemes but for private internal fencing. It became the common fencing in all parts of the country. And with it was coupled the planting of hedgerow trees. And so the English countryside became the lovely individual thing it is. Not for nothing had Evelyn invoked his countrymen to adorn the natural landscape. It was still his inspiration that led them, now that the time had come, to use the great opportunity of a change in the agricultural system for effecting with it an adornment of the rural scene.

The artistic impulse that Evelyn had inspired sprang out with renewed vigour at this time. Every landlord, whether he was involved in inclosure schemes or not, became an enthusiastic practitioner of landscape art. The literature of the period is as full of planting and

rural adornment as to-day's is of popular science. Infinite discussion and vast sums of money were expended on this art which every man could practise. And so, at the very time when Cowper was speaking of the God-made country, the English countryside was being humanized with a surprising energy and admirable imagination.

A century before there had been some attempts to dominate the natural countryside in the French manner, with great avenues and a general torturing of natural features. But the 'invincible undulation' of the English landscape, and the growing appreciation of natural beauty, had defeated this. And now the activities in the countryside were influenced by a realization and acceptance of natural informality and were governed by an attempt to emphasize this informality rather than to destroy it. The chief of the professional practitioners of this new 'landscape planting' were Kent and Capability Brown, and after them, Repton. These people have been much blamed, and rightly, for certain of their practices. In their success they fell into extremes of affectation. Their effect on gardening was deplorable, and upon them, through their disciples, must be saddled the responsibility for the incredible fatuity that long afterwards characterized English garden and small park design. But despite the evils of which it is capable, it was the 'landscape planting' which these men and a thousand others worked in, that moulded the English scene into what it is to-day.

Horace Walpole's encomium of Kent (Essay on the *History of Modern Taste in Gardening*, 1785) reflects accurately the enthusiasm that was almost universally aroused by the new art.

'At that moment appeared Kent, painter enough to taste the charm of landscape, bold and opinionative enough to dare and to dictate, and born with a genius to strike out a great system from the twilight of imperfect essays. He leaped the fence and saw that all nature was a garden. He felt the delicious contrast of hill and valley changing imperceptibly into each other, tasted the beauty of the gentle swell or concave scoop, and remarked how loose groves crowned an easy eminence with happy ornament. . . . The pencil of his imagination bestowed all the arts of landscape on the scenes he handled. The great principles on which he worked were perspective, and light and shade. Groups of trees broke too uniform or too extensive a lawn: evergreens and woods were opposed to the glare of the champaign. . . . Thus selecting favourite objects and veiling deformities by screens of plantation, sometimes allowing the rudest waste to add its foil to the richest theatre, he realized the compositions of the greatest masters in painting. . . . Dealing in none but the colours of Nature and catching its most favourable features, men saw a new creation opening up before their eyes. The living landscape was chastened or polished, not transformed. Freedom was given to the forms of trees: they extended their branches unrestricted, and where any eminent Oak, or master Beech, had escaped maiming and survived the forest,

bush and bramble was removed and all its honours were restored to distinguish and shade the plain. Where the united plumage of an ancient wood extended wide its undulating canopy, and stood venerable in its darkness, Kent thinned the foremost ranks and left but so many detached and scattered trees as softened the approach of gloom, and blended a chequered light with the thus lengthened shadows of the remaining columns. . . . So many men of all ranks devoted themselves to the new improvements, that it is surprising how much beauty has been struck out, with how few absurdities. In the mean time, how rich, how gay, how picturesque the face of the country! Every journey is made through a succession of pictures; and even where taste is wanting in the spot improved, the general view is embellished by variety. If no lapse to barbarism, formality and seclusion is made, what landscapes will dignify every quarter of our island when the daily plantations that are making have attained venerable maturity!

'Since we have been familiarized to the study of landscape', Walpole concludes, 'we hear less of what delighted our sportsmen ancestors, *a fine open country*. Wiltshire, Dorsetshire and such ocean-like extents, were formerly preferred to the rich blue prospects of Kent, to the Thames-watered views in Berkshire, and to the magnificent scale of Nature in Yorkshire. An open country is but a canvas on which a landscape might be designed.' (And a previous footnote describing a particular landscape effect leaves no doubt as to from whom the pictorial inspiration of these Georgian landscapists was derived. 'Extensive lawns richly enclosed by venerable beech woods, and chequered by single beeches of vast size . . . recall such exact pictures of Claude Lorraine, that it is difficult to conceive that he did not paint them from this very spot.')

No such great artistic impulse to rural adornment as this has occurred at any time in any other country. Here in the second half of the eighteenth century the modern English scene was moulded into its unique man-made pictorial individuality.

The impulse continued well into the nineteenth century and it was favoured during the whole of its course by the special circumstance which had afforded it so wide an expression, by the continued inclosure and redistribution of the land. After the great activity of the 1765-85 period, the annual amount of inclosure began to fall off, probably owing to the heavy expenditure involved in the promotion of the schemes; but upon the passing of the first general Inclosure Act of 1801, which simplified the procedure and reduced the expense, inclosure took on a further lease of life. In the first year of its existence, 1801, no less than 119 schemes inclosing probably more than 300,000 acres, were promoted through this new Act. And so, in some years, another 1½ or 2 million acres were inclosed, chiefly this time from the waste, from the great areas of moor and fen which still survived. But again the movement spent its force and again in 1845 a new Act, still further simplifying procedure, was passed; and once more

inclosure went forward, chiefly this time affecting the manorial commons, from which, however, only some 600,000 acres were inclosed before the entire movement (which had served its purpose and was now doing more harm than good) came to a sudden and final end in 1869.

About this time, too, or even before it, the artistic impulse to rural adornment also failed. By the middle of the nineteenth century the English scene had probably reached its highest perfection. The great eighteenth-century plantings had attained maturity. The countryside was the infinitely various succession of Claude Lorraine scenes which the Georgians had aimed at making it, with still sufficient mountain and moorland remaining untouched to foil and contrast with the man-directed pictorial perfection. Thereafter, though little or no new planting was undertaken, the great landlords exercised a guardianship, though an ever weakening one, over the beauty that their forefathers had created. But already at the moment of perfection, destroying influences were at work. Railways, collieries, and all the accessories of industrialism spread corruption over the natural scene. These were a blatant and obvious corruption, but they were less dangerous in the long run than the subtle change that was coming over man's attitude towards landscape. Even before the new humanized scenes had attained perfection, even while yet the great improvements were going forward, there began a changing of values. Soon the country that God had anciently made was more valued than that which man had so recently and so beautifully transformed; and a bare fellside in Cumberland was by many deemed lovelier than the whole Weald of Kent.

To-day worse corruptions than railways have attacked the rural scene. The humanized landscape, the normal lovely English countryside, is at the mercy of a double corruption; for while the mechanized developments of modern civilization batter and bruise it, the natural corruption of time besets it. Shortly its principal elements of decoration, the instruments of its individuality, trees and hedgerows, must in their old age fall away. They have already passed their maturity. Through lack of interest, through the change of values, they are not being renewed or replaced. So, eventually, where their beauty has been there will be only an aching emptiness, neither the purely man-made nor the purely God-made country, but the country that man has made and God has unmade.

3. BEAUTY-SPOT OR NORMAL LANDSCAPE?

The modern attitude to 'scenery' that will inevitably result in this decay of the humanized landscape is well illustrated by a decision which the bench of magistrates at Uxbridge, Middlesex, arrived at

in January 1931 when the Middlesex County Council prosecuted in some twenty or more cases of alleged infringement of their by-laws regulating advertisements. It was alleged that a number of advertisements injuriously affected the landscape which stretches out on either side of the Bath Road at Colnbrook near the county's western boundary. The countryside there is very level, with a rich dark soil that is intensively cultivated; it is studded with large orchards, a few thinly-sown cottages and farms, and an occasional village: it is diversified by hedges and scattered trees: ordinary, pleasant, homely (though not typical) country, miles from a main-line railway, quiet and unfrequented save where the Bath Road slashes through it. But, because they could not regard the district as a 'beauty spot', the magistrates ruled that an advertisement measuring some 6 feet by 4, and bearing one word—the name of a famous brand of beer—and standing at the edge of an orchard along the roadside, did not constitute a disfigurement of rural scenery: nor, they went on to decide, did a hoarding measuring 75 feet by 5, which carried the usual variegated assortment of miscellaneous posters: nor did another twenty similar objects.¹ They obviously regarded this countryside as having no 'rural scenery' to disfigure. Enlightened gentlemen! Yet in their interpretation of 'scenery', they were but reflecting the modern attitude. Only the wild, the spectacular, the picturesque is scenery nowadays. The homely levels of rural Middlesex are not scenery at all: they are merely 'flat country'.

The romantic appreciation of wild scenery is an entirely modern thing, which is not, however, incompatible with a simultaneous appreciation of quiet, normal, humanized landscape. It may roughly be reckoned to date from Wordsworth, though he was the first to give it beautiful expression rather than the first to experience it, for even before he popularized mountain and lake, tourists had begun to frequent his Lake District to extract a genteel thrill from 'horrid rocks and awful precipices'.

Up to the last two or three decades of the eighteenth century, that is up to the period of the greatest appreciation of and the widest practice in humanized landscape, mountains and moors had been regarded as unsightly and worse than useless excrescences upon the landscape. Goldsmith complained that they 'interrupt every prospect', and when Dr. Johnson was asked how he liked the Highlands, 'the question seemed to irritate him' (says Boswell), 'for he answered, "How, sir, can you ask me what obliges me to speak unfavourably of a country where I have been hospitably entertained. Who *can* like

¹ *Architects Journal*, February 4, 1931.

the Highlands? I like the inhabitants very well" '—in which the conservative Doctor was but expressing what had been the universal attitude until a few years before.

Some idea of the early feelings towards the now cherished wilds may be glimpsed in this extract from the *Gentleman's Magazine* of February 1761, though here already appreciation is dawning, for where before the scenes would have been avoided and ignored, the writer is obviously squeezing all the thrills that he can from them.

'Few are perhaps acquainted with that dreary part of Westmoreland which borders Yorkshire. Indeed its forbidding aspect, composed of lofty mountains, whose craggy summits seemed formed of rocks thrown together by the hand of discord, and frightful deserts, laid waste by the piercing storms of the north, tend to extinguish curiosity and prevent travellers from seeking the recesses of a country, which promise only labour and fatigue. The roads, or rather paths, between the mountains that lead into those sequestered retreats are often frightful beyond description. One particularly, about a mile from Wildbore Fell, deserves notice. The track, which runs along the side of a mountain almost perpendicular, is not above six feet wide. Above, enormous projections of rock hang over the head of the traveller and threaten to crush him by their fall: while far below a rapid torrent tumbles headlong into the valley, and, with its bellowing noise, excites a terror in the mind that language cannot paint. Not a shrub nor blade of grass enlivens the prospect: the whole side of the mountain appearing as if blasted by lightning, and the place where black despair has fixed her dire abode.'

A different attitude indeed to that of the modern 'hiker' who would familiarly bestride such a place between waking and breakfast!

Another extract, this from the *London Magazine* of 1778, reveals the difference between the attitudes to the wild and to the humanized.

'Entering the justly celebrated Dovedale, we rode about three quarters of a mile along the side of the river Dove, when, having ascended the rocks, my kind companion directed me to the summit of a hill, the peak of which was not much more than two yards in circumference. The perpendicular view from this summit into the Dove beneath was truly terrible to an eye not accustomed to such scenes. I sat down, for I dared not stand to view the amazing prospect; . . . the prospect down the Dove, and over the rocks and slopes of hanging woods on the side, being magnificently horrible. . . . Stupendous height; solemn gloom; awful scene.'

And then how caressingly, how tenderly the quieter homeward country is described.

'Here gentlemen's seats and parks, there villages thickly scattered, around which cattle feed on the enamelled turf, while the roar of brooks and rivers serve as music to enliven the scene.'

But perhaps the best idea of the change of attitude may be conveyed by citing Johnson and Ruskin, a hundred years apart and each representative of his period.

Here is Johnson speaking of the Grampians in his *Journey to the Western Isles* (1775).

'What is not heath is nakedness, a little diversified by now and then a stream rushing down the steep. An eye accustomed to flowery pastures and waving harvests is astonished and repelled by this wide extent of hopeless sterility. The appearance is that of matter incapable of form or usefulness, dismissed by nature from her care and disinherited of her favours, left in its original elemental state or quickened only with one sullen power of useless vegetation. It will readily occur that this uniformity of barrenness can afford very little amusement to the traveller: that it is easy to sit at home and conceive rocks and heath and waterfalls; and that these journeys are useless labours which neither impregnate the imagination nor enlarge the understanding.'

How different a conception is this and at what a polar extreme is it to Ruskin's—

'Mountains are the beginning and the end of all natural scenery' (c. 1860).

Johnson's attitude seems to us to-day almost inconceivably obtuse and unimaginative, but in reality it is no more so than Ruskin's, and it is far more humanly understandable. But both in fact are completely unbalanced: mountains are neither the beginning and the end of all natural scenery nor imaginatively barren and intellectually unprofitable lumps of hopeless sterility. They afford one type of the many types of scenic beauty that produce sensations of delight and pleasure in the human observer. To-day when the wonders of the world have been so universally explained and reduced, when so much that is trivial and transient occupies the workaday minds of so many, they have a special appeal to us: so have the wild places of moor and fell which give unrestricted liberty of action to our city-bound bodies and wide uninterrupted expanses to our close-focused city eyes. So everywhere mountain, moor, and the special places that are called 'beauty spots' are valuable as foils and contrasts to the familiar everyday landscapes. But of the two extreme attitudes Ruskin's is by far the more dangerous, for while it values the scenes that are least subject to human direction and which will stand perpetually of themselves and are not dependent on human maintenance—(that is, so far as the *natural* part of the landscape is concerned though not the artificial parts which we will consider later)—while it values these scenes, it ignores and cares nothing for those which, since they were man-directed, depend entirely on human maintenance for their preservation.

It is disastrous, therefore, that Ruskin's attitude (modified to include moors, downs, and all wild and spectacular scenes, as well as mountains) should persist to-day, and that the normal individual countryside of hedgerows and trees, should be given, at most, but a tepid affection, and that, in this time of destruction, all the vigour of the movements for preservation should be marshalled on behalf of the spectacular, the abnormal, the beauty spot. When appeals are made to the public for money to preserve landscape, they are always concerned for special areas: the Lake District, the North and South Downs, the Devonshire moors, the Seven Sisters, Stonehenge, Friday Street, and so on. The National Trust, admirable body though it is, is similarly concerned with the abnormal. And when a Royal Commission (the National Park Committee) is appointed 'to consider measures for the preservation of the natural characteristics of the country' it reports that 'there are in this country areas of peculiar interest to the nation as a whole—typical stretches of coast-line, mountainous regions, moors and downs, river banks and fen: these areas constitute an important national asset, and the nation cannot afford to take any risk that they may be destroyed'; and it makes hardly a passing reference to the one unique national possession, the *ordinary* countryside. So the tale goes on. Always the abnormal—the English abnormal, which is the world's commonplace.

But as Dr. Vaughan Cornish has said, 'the lowlands of Britain are the part of the island which has most scenic importance in the estimation of persons of taste in all countries save our own, for whereas every feature of wild landscape in Britain can be matched or excelled, the unspoiled parts of Agricultural England have a beauty which is unique in the scenery of civilization'. Perhaps we are too accustomed to this beauty to appreciate it at its worth: perhaps ours is a true instance of the contempt that is bred by familiarity. We need to take counsel with strangers to freshen and correct our corrupted sense of values.

Here, then, we might well consider the impressions of the German, C. P. Moritz, who recorded his *Travels through Several Parts of England* in 1782.

'There are hills on either side, clad with so soft and so mild a green, as I have nowhere else seen equalled. The charming banks of the Elbe, which I so lately quitted, are as much surpassed by these shores as autumn is by spring! I see everywhere nothing but fertile and cultivated lands; and those living hedges which, in England more than in any other country, form the boundaries of the green cornfields and give to the whole of the distant country the appearance of a large and majestic garden.'

And again—

'Naturally, perhaps, the earth is everywhere pretty much alike, but how different is it rendered by art! How different is that on which I now tread from ours, and every other spot I have ever seen. The soil is rich even to exuberance, the verdure of the trees and hedges—in short, the whole of this paradisaical region, is without parallel!'

His account is a sustained rhapsody—

'The circumstance that renders these English prospects so enchantingly beautiful, is a concurrence and union of the *tout ensemble*. Everything coincides and conspires to render them fine, moving, pictures. It is impossible to name or find a spot on which the eye would not delight to dwell. Any of the least beautiful of any of these views that I have seen in England, would, anywhere in Germany, be deemed a paradise.'

'Beneath I trod on that fresh, even, and soft verdure which is only to be seen in England. . . . O ye copsy hills, ye green meadows, and ye rich streams in this blessed country—how have ye enchanted me!'

And finally—

'The country here became so fine that I positively could not prevail on myself to quit it; and so I laid myself down on the green turf, which was so fresh and sweet that I could almost have been contented, like Nebuchadnezzar, to have grazed on it.'

Here is praise to open patriotic eyes! Yet, lavish though it is, it is echoed nearly 150 years after by another mid-European visitor—as indeed it is echoed in some degree or other by all. Karel Capek in his *Letters from England* in 1925 says:

'Where are you to pick words fine enough to portray the quiet and verdant charms of the English countryside? . . . I have wandered along roads lined with quickset hedges, sheer quickset hedges which make England the real England, for they enclose but do not oppress: half-opened gates lead you to ancient avenues of a park deeper than a forest. . . .'

'England is really only a large English park, just fields and meadows, lovely trees, adorable field paths. . . . The trees are perhaps the most beautiful things in England, splendidly broad-shouldered, ancient, generous, free, venerable, vast trees. . . .'

'I do not know why, but this sober England strikes me as the most fairylike and romantic of all countries I have seen. Perhaps this is on account of the old trees. Or no, it is perhaps the result of the greensward. It is because you walk here across the fields instead of upon footpaths. We Continental people do not venture to walk except on roads and paved paths: this certainly has a huge influence on the development of our minds. . . . At last even I ventured to make my way straight across the grass to an old oak. . . . Never have I had a feeling of such unrestricted liberty as in that moment.'

Here are no ecstasies on mountain and moor. It is not the weekend scenery of the Lake District and Snowdonia that ravishes these peoples' minds: it is our average, normal, ordinary, everyday *English* scenery.

. Do not these testimonies show us wherein our true inheritance lies, how deeply our sense of values has become corrupted? Our landscape has been moulded by our forefathers to a work of high art, lovely, unique, man-made, but still free. Shall we, because of a childish love of the spectacular, because of a Gothic romanticism, let it perish and fall away into the nakedness of the universal landscape?

4. HEDGES AND TREES

The beauty of our normal countryside may to a considerable extent arise out of the favouring accidents of a geological formation that gives it the undulations which afford variety, which break it up into an infinite sequence of changing pictorial compositions, or out of the blessed climatic conditions which clothe it with so soft and fresh a colouring. These conditions would still give it individuality even without their being exploited by art. But the difference that art has made may be appreciated by a comparison of the English lowlands with the Scottish, where similar geological formations and climatic conditions prevail. Across the Border there is a noticeable difference of landscape effect. There the inclosure movement and the art of rural adornment never advanced as they did in England; and where here you see the immediate surroundings filled with the lovely details of individual trees and hedges, and all the distance softened and enriched by them, there you have an open countryside that appears scragged and naked because fences and ditches take the place of hedges, and because separate-standing and small-grouped trees are but few, while all the distance would be harsh and bare were it not for one's consciousness of enclosing hills. The Scottish lowland landscape is, in character, somewhere half-way between the individual English and the universal Continental landscapes: it has diversified form and fresh verdure but it lacks the enriching details of conscious art.

The materials through which the English landscape has been enriched are of the simplest—simply trees and hedges. The hedges give it a rhythm and a pattern and break up the distances into small units that are friendly to man and flattering to his stature and power; the trees do likewise, and because of their height they do more than reduce the scale of the earth, they mitigate the oppression of the sky. And they do these things besides affording the delight that radiates from their own inherent loveliness.



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2. ENGLISH CHEQUER-BOARD



H. Williams

3. DOWN AND WEALD

We are the inheritors of a landscape that has already been almost fully developed. All that we have to do to conserve its beauty is to maintain the materials out of which it has been created, replacing them as they decay. Here and there we may fill in a corner that has never been developed, or we may modify existing scenes where we could create fresh beauty. But in the main our responsibility is of maintenance only. A light responsibility, surely, for so splendid a heritage: yet a responsibility of which we have been callously negligent.

What for instance do we do to maintain the most modest of the adorning materials, the hedgerows, those living, rounded, comfortable objects of utility and beauty, the nesting-places of our birds, the bearers of the 'moonlight-coloured may'? We do hardly anything at all: a little trimming now and then: nothing more. The hedges fall into gaps: in gaps they remain, closed, if closed at all, by barbed and barbarous wire. It is safe to say that hardly a single hawthorn plant has been set in the hedges of the countryside throughout the whole course of this century.

It is sometimes argued that our small hedge-bordered fields are a handicap to our agriculture, that if our home-grown cereals are to compete in the home market with those produced abroad they will have to be produced in some prairie-farming fashion from large farms of vast unbroken fields. If it is so we shall have to be reconciled to the loss of our hedgerows, for the countryside as a direct means of human life is far more important than the countryside as a pictorial composition. But this argument is very far from being universally acceptable, and not the slightest effort is being made to put it into practice. When hedges disappear or deteriorate they do so not out of the definite intent of the farmer, not out of a revision of agricultural policy, but simply because they are uncared for. That is the deplorable thing. Surely until they are definitely discarded as obstacles to agriculture, these elements of beauty are worthy of maintenance where they exist and of establishment where their boundary-defining and enclosing purpose is now served by unbeautiful mechanical fencing.

And as for the primary materials of rural adornment, what can sufficiently be said in praise of them? Trees are the loveliest of all created natural objects, and he who plants them makes living and enduring poetry. Evelyn has a beautiful passage in his *Sylva* on the planting of them.

'Men seldom plant Trees till they begin to be wise, that is, till they grow old and find by Experience the prudence and the necessity of it,' he says. 'When Ulysses, after a ten years' absence, was returned from Troy and, coming home, found his aged father in the field planting of trees, he asked him why (being now

so far advanced in years) he would put himself to the fatigue and labour of planting that which he was never likely to enjoy the fruits of? The good old man (taking him for a stranger) gently reply'd, I plant (says he) against my son Ulysses comes home.'

But badly as the hedges have fared, the trees have fared worse. The ordinary process of time would alone have accounted for much loss, but the wholesale felling of timber that necessarily went on during the War, and that has unnecessarily gone on since in innumerable 'development' schemes, has left great yawning gaps and pitiful gashes in many parts of the country. Yet here also nothing has been done to repair the damage. There has been no extensive planting of trees for half a century or more. It is true that economic afforestation is now being vigorously pursued; but it has nothing to do with rural adornment and is often directly contrary to it. One of the most striking differences between the English countryside and the universal countryside arises because here in our hedgerows, and in our fields and smaller woods, trees are grown for beauty and not for commercial reasons, and are allowed to attain the special beauty of their old age; while abroad they are generally grown for their monetary rather than their artistic value and are cut down as soon as they attain their highest value in that sense. Moreover, it is from the single-standing hedgerow trees and from the clumps and the copses that the English landscape receives its beauty; it is they that give the country its gentle park-like character. And it is they rather than the woods, important and lovely though those may be, that it is essential to maintain if England's beauty is not to perish.

'The trees are perhaps the most beautiful things in England; splendidly broad-shouldered, ancient, generous, free, venerable, vast trees'; rounded deep-bosomed trees that echo the rhythm of the rounded English earth, where easy undulations rise in gentle swell or fall in concave scoop, where even the mountain breasts are rich, full, flowing curves of smooth turf. These are the trees that have given England beauty; broad-shouldered, generous, vast trees; ash, elm, oak, beech, chestnut, sycamore. These are the trees that will conserve its beauty. Angular conifers may be beautiful where they echo the rhythm of craggy, angular landscapes. They have little place in England. Exclamatory, stridently vertical poplars also have their place in the scheme of things, but not in England. Rounded deciduous trees 'in loose groves crowning an easy eminence with happy adornment', standing free and generous in the fields and hedgerows, crowding occasionally into a bosky wood, of such is the beauty of the English countryside.

In relation to the beauty that results from it, the art of rural adornment is singularly simple. It is every man's art. It requires only an appreciation of the significance of natural forms and a feeling for their appropriateness in certain places. It is, moreover, an art capable of but few gross misapplications; and its chief misapplication, which would result in an overcrowding of the landscape, is particularly remote for many years to come.

Oh for another Evelyn, another generation of Georgians, to inspire us to value, to maintain, and to extend the beauty of this lovely *normal* English landscape!

5. THE MASSACRE OF FLOWERS

Sometimes it seems that nothing in the whole countryside, not even the lowliest thing, is free from destruction. It is not only that the general character of the landscape is affected, even the smallest details of it suffer a fury of violation which only by a miracle they will survive. It is comparatively easy to understand how beauty may be allowed through our inactivity to pass away, when hedges and trees fall and are not replaced. It is even understandable, sometimes, that these things may be destroyed for the money that they may bring. But it is difficult to imagine that the common flowers that we are accustomed to think of as springing up every year in their millions are in danger of extermination, if not of complete extermination over the whole country, at least over wide areas of it. But such is the case. It is not impossible that, in a rapid process of time, primrose, daffodil, violet,

'Faint oxslips, tender bluebells at whose birth
The sod scarce heaved',

and a host of other sweet and lovely denizens of the countryside will have been carried quite away.

Year after year the massacre of the flowers goes forward with a fury of destruction that rises to amazing and tragic heights. Charabanc companies vie with each other for slogans of encouragement. One advertises, 'Wild-flower rides. Stop for half an hour and pick armfuls'. Another competes with 'Tours to the bluebell woods. Bring your baskets and trowels'. And out they drive, load after load of them, and with a feverish exalted energy ply trowels, knives, and fingers to uproot and ravish the beauty that they find. Then after the scheduled half-hour is past, they go home, dribbling their spoils along the road as they go, leaving behind a pitiful gash that it will take fifty springs to heal again. Week-ends and evenings, hundreds of motorists do the same thing. Where they strip a bank of its flowers they leave it litter

instead, often enough a litter of its own ravished beauty. And for the motorists who are too idle or not sufficiently ruthless to pluck their own, there are professional flower-pickers who will supply their demand by ready-picked bunches at a few coppers a time. And, perhaps the worst feature of it all, school children, separately or in organized bands, go scouring the countryside to make up hundreds of bunches to compete for trivial prizes in flower-shows.

Under such conditions it is impossible that certain flowers will not be exterminated over wide areas.

It is a sorrowful business in every way. It is not only the destruction of beauty, it is the perversion of a charming natural instinct—(and the satisfaction of a base one, the acquisition of 'something for nothing'). To end it will probably mean the forbidding of one of the immemorial delights of childhood. But it will have to be ended. If it is not ended artificially, it will be naturally—by the annihilation of the flowers.¹

¹ A by-law recommended by the County Councils Association provides that, under the payment of a sharp fine, 'no person shall (unless authorized by the owner or occupier, if any, or by law, so to do) uproot any ferns or other plants growing in any road, lane, roadside waste, roadside bank, or hedge, common or other place to which the public have access'. If such a law were systematically enforced for a number of years, the present destructive habits, which are generally the result only of thoughtlessness, might be broken. After all, a similar prohibition already applies to the collecting of birds' eggs, another 'natural instinct', though not a charming one.

CHAPTER III

BUILDINGS IN LANDSCAPE

I. GENERALLY

BESIDES the diversified charm of the natural landscape with its continually varying character of hill and dale, level plain and gentle undulation, and besides the native loveliness of the natural forms with which the men of past ages have decorated and humanized that landscape, a large part of the beauty of the English rural scene arises from the humble and sympathetic way in which man has set within it his material necessities, his buildings, his bridges, and his roads.

His sympathy may have been instinctive rather than conscious. It may have arisen out of necessity as well as humility. He may have used the sympathetic materials of his neighbourhood for his buildings because no others were available. He may have chosen the unobtrusive site for his cottage because that was the site forced upon him by the necessity of having water or by the desirability of having shelter against wind and weather, or because that was the site that some local magnate, a self-appointed guardian of amenities, had apportioned to him. But however he came at his site, his materials, and the vernacular expression of his building forms, he has left everywhere for us to-day 'sermons in stones' and a simple code which he who runs may read for the improvement of his conduct in the presence of a great beauty.

2. THE OLD BUILDINGS

These old buildings arose out of traditions that are gone. They were created in past time out of the spirit of past time. Their likeness could never happen again. Most of them had beauty when first they were made, or a modest simplicity that is akin to beauty. Each one was a thing apart; a work of individual craftsmanship. And if they had beauty then, centuries of summer suns and winter frosts have given them additional beauty. Even when they had none the seasons have given it to them. But theirs is the perishable beauty of all material things: it is more perishable even than that of the other material arts, for whereas sculptures and paintings serving no indispensable physical necessity, are unlikely to be lost through alteration or destruction because of changing requirements, buildings, based on a physical necessity, are likely to perish when the individual necessity that created them changes or passes away. More perishable than sculptures or paintings, buildings are still more perishable than purely intellectual

works of art. The beauty of Chaucer's poetry and Shakespeare's, of Byrd's music and Purcell's, is not perishable like the beauty of the buildings they moved among. Vanbrugh's buildings may topple down in a night, but his writings are perpetually preserved. And there is more than this. The old buildings are the sole works of art of countless humble unknown craftsmen. These left no words or music, save in an old ballad or two, no painting or sculpture. They left us only cottages, barns, mills, and taverns.

These old buildings, then, represent a perishable but an irreplaceable type of beauty. They have been; they are; but they will never be again. Once lost they cannot be regained. As such we should surely keep them tenderly and reverently, for their own sake.

But they are more than things of beauty. They are almost the sole visible evidences of our past; they are living memorials of the historic stages, the stepping-stones of our development.

'Names are gone—what men they were
These their cottages declare.'

And more than cottages: barns, forges, mills, mansions, bridges, churches, castles, barrows—all are the visible evidences of our past. For this, too, they demand preservation. For a nation without a past, and without everyday evidences of it, is 'as dull to live with as a man without a memory'. Particularly is this so to-day: the present is universally common and standardized; but each nation's past was individual. It is the charm of the highways and by-ways of Britain that one can hardly travel more than a few miles anywhere without encountering some vivid reminder of the thronged centuries of our civilization, of the struggles and aspirations of the myriads of little lives that have gone before ours, of the fact 'that hereabouts men used to live and die'. It may be some stone circle or a barrow on a lonely heath. It may be a shepherd's cottage near to these. It may be some Roman amphitheatre or small village lying bared after a long lapse of time in the midst of cornfields and orchards. Or some moated grange, or a hill-crowning feudal castle, a fortified rectory, a crumbling peel-tower. Or, instead of these fierce memorials, it may be some more kindly reminder: the domesticated black and white or rambling stone or mellow brick of a Tudor house, or the gracious serenity of a Georgian mansion, or the warm clustering buildings of an old farmstead, or a smithy, a windmill, a watermill or the fine arch of an ancient bridge. Or, in place of this far-flung pageantry, one may see in any one of a thousand villages the whole story unroll itself in a little space where the buildings of half a dozen centuries are bound together in a complete progressive harmony.

Dull would he be of soul who could let this living chronicle of his heritage pass from him.

Yet pass it will, both the beauty and the romance, unless effort is made to retain it. As if the agencies of time and changing necessity were not sufficient, two other agencies have now been added for its destruction. So seductive, on the one hand, is the appeal of this visible history, that a country without any of its own is willing and anxious to adopt ours; and whole buildings are being spirited away, stone upon numbered stone, beam upon beam, to give romance to alien American scenes. So insensitive, on the other hand, are some of the people whose heritage this history is, that they will wantonly defile it for mean ends by surrounding it with a destructive incongruity and vulgarity, or, with less contemptible motives, by undertaking destructive industrial works in its neighbourhood. Thus, during the last two or three years the two greatest and oldest of all our national memorials have been threatened by and most narrowly saved from a fate almost worse than that of obliteration. The solitary and austere grandeur of Stonehenge that has stood for unknown aeons of time silhouetted against the dim dawn of our history, has been saved—with what an effort and at what a cost!—from the degradation of petrol pumps, bungalows and refreshment shacks, in which the Government itself, to its lasting shame, had set an example. And Hadrian's Wall, the first great rampart raised by our dawning civilization against the barbarian, still standing in its ancient strength after two thousand years, has been saved—temporarily!—against a quarrying scheme that threatened to hack away its very foundations. And besides these two great catastrophes which have been averted, there are hundreds of lesser ones which have not.

Our old buildings should be preserved—and preserved worthily. How can this be done?

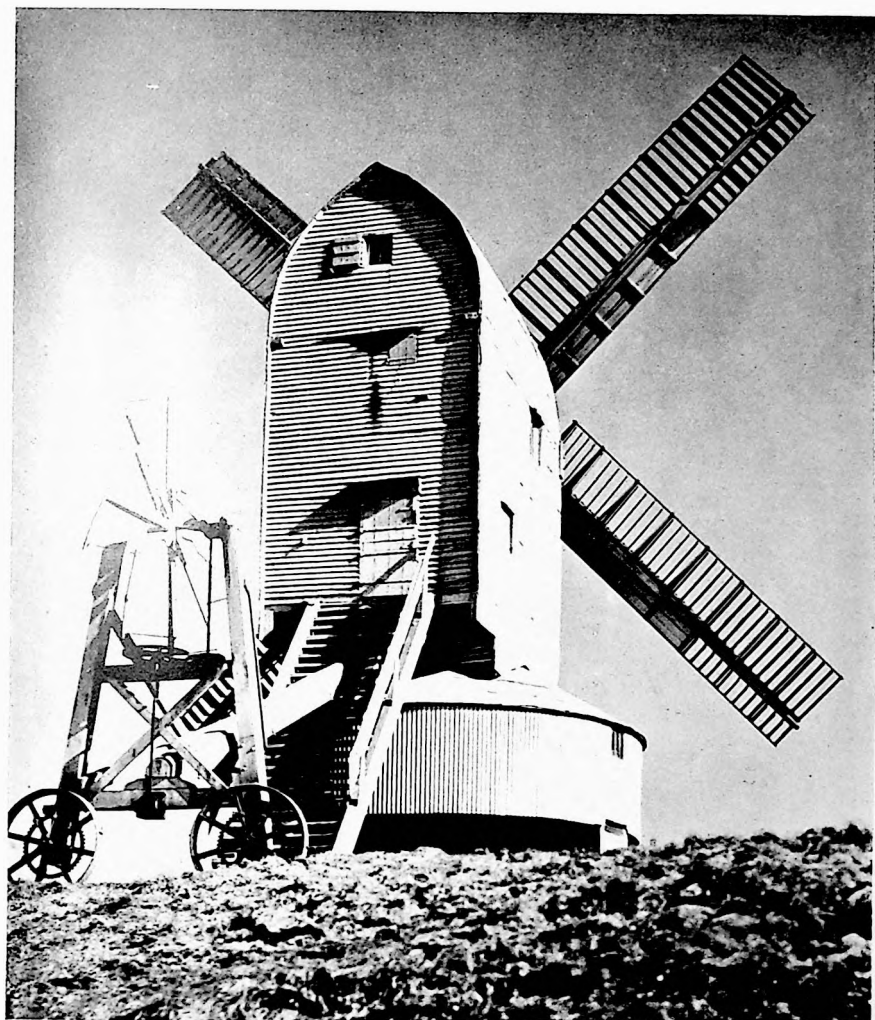
There is legal machinery for preservation in the Ancient Monuments Act of 1913. Under this Act no building or object of historical, architectural, traditional, artistic, or archaeological interest which has been scheduled as an 'ancient monument' within the provisions of the Act, may be demolished, removed in whole or in part, structurally altered, or added to until after statutory notice has been given to the Commissioner of Works. The schedule of ancient monuments itself is merely precautionary, but it registers the importance of the buildings and enlists the interest of the owners and the public in their protection. In urgent cases where unsatisfactory alterations may be intended to be proceeded with, the Commissioners may, moreover, take definite action and prevent any works being done within a period of eighteen

months, during which time arrangements may be made for the buildings' permanent protection; and further, an owner may constitute the Commissioners or the County Council the guardians of the monument and so relieve himself of undue responsibility. Under this machinery and through the agency of the Society for the Preservation of Ancient Buildings much good work has been done and some 3,000 monuments have been scheduled for preservation.

But while the 1913 Act is good so far as it goes it does not go nearly far enough. Several classes of buildings are excluded from its application. Ecclesiastical buildings which are still used for ecclesiastical purposes are among these. This is not nowadays a very serious matter, for the old ruthless craze for restoration has long since died down and it may be said that all recent repairs and alterations to church fabrics have been undertaken in a right spirit of sympathetic preservation, particularly during the last ten years or so, since a system of advisory committees has been established all over the country to assist the church authorities on artistic and archaeological questions relating to church buildings and their contents. A much more serious exemption, however, has been that applying to domestic buildings. These, while they were occupied otherwise than by a caretaker, might not be scheduled; and no means existed, save by persuasion or agreed purchase, for preventing their alteration or destruction at their owners' inclination. Thus it is that, despite the Act, numerous fine examples of domestic building have been destroyed or shipped to America. But more serious still is the lack of power invested for the protection of the areas surrounding a preserved 'monument'. Stonehenge and Hadrian's Wall were both scheduled as ancient monuments, yet the Act offered no powers for the prevention of the disasters that almost overwhelmed them.

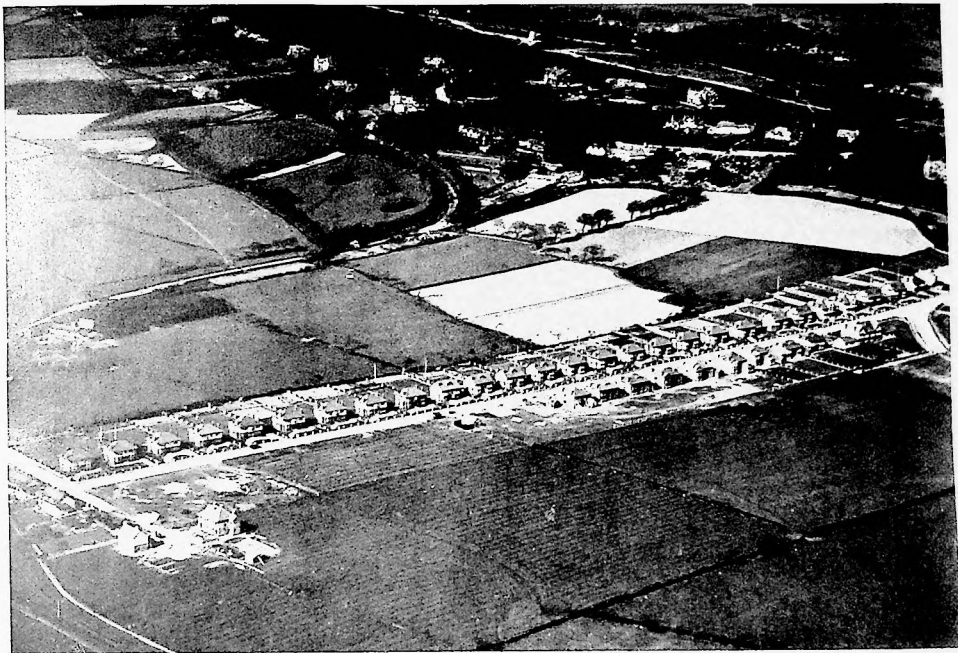
Now, fortunately, these loopholes have been closed by the recent Ancient Monuments Act of 1931. This, among other new powers, gives the Commissioners of Works authority to include in their scheme of preservation 'any area comprising or adjacent to the site of the monument to which it is necessary, in their opinion, that the scheme should apply', and gives authority to 'prohibit the export of any monument or part thereof from Great Britain' and in general defines as a 'monument' which may be protected 'any building, structure, or other work, whether above or below the surface of the land, other than an ecclesiastical building for the time being used for ecclesiastical purposes'—and so includes the great class of domestic buildings which was lately exempted.

So now the preservation of the beauty and interest of many of the



H. Williams

4. ANCIENT MONUMENT



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old buildings is fairly assured. The Ancient Monuments Act, however, can only be applied to the more outstanding examples, and innumerable small and modest buildings will not come within its application. A Ministry of Health circular (No. 756) speaks of these as follows:

'It will be realized that the beauty of the English countryside depends very largely on the general appropriateness of local materials and character of building generally found in the older buildings. The types of cottage vary very much in different localities and go far to give a special character to each district. Consequently the preservation or destruction of the amenity of the countryside depends not merely on the smaller number of cottages which have an exceptionally high degree of architectural merit or special antiquarian interest, but on the larger number of country cottages of the average local type. . . . If the work of reconditioning these is carried out with reasonable skill and care, very much may be done to preserve and perpetuate the styles of cottage architecture which have come down to us from former times; while, on the contrary, if repairs and reconditioning are carried out without regard to the suitability of the materials and treatment, or so as to involve the destruction of the proportion and beauty of the design, much damage might result.'

There still remains, then, much preservation depending on the sympathetic interest of semi-public societies and private individuals. It is good, therefore, to see such activities as that of the Royal Society of Arts which has purchased and is jealously guarding and carefully reconditioning the entire village of West Wycombe, and to know that many other societies, including the Royal Institute of British Architects, and the Council for the Preservation of Rural England, are working in various ways, such as through the Housing (Rural Workers) Act of 1926 for instance, towards preserving, not as sterile museum pieces but as living and useful things, some of the humblest of the beautiful and historic buildings of the countryside.

3. AN ANTICIPATION

But if a nation without a past, and without visible evidences of it, is as dull to live with as a man without a memory, a nation caring only for the past and letting the calamitous present go hang is not merely dull but is as good as dead. Most desirable as the preservation of the visible past is, the guidance of the present is a far more important and an even more difficult task.

There is, indeed, a danger in some quarters of an unbalanced concentration on this one aspect of rural amenity. There are some who regard it as satisfactory to save half a dozen old cottages while the normal rural character of half the surrounding county is being lost. That is a pitiable and a dangerous attitude. As with the natural

landscape, so with the buildings in it; we must avoid concentration on the special, the picturesque, the beauty-spot. The normal, the average, is at least as important.

New buildings must spring up in the landscape, alongside the old. They must spring up at a far greater rate than ever before, at so swift a rate, in fact, that unless we guide and control them they will not only change the face of the countryside, they will altogether destroy large parts of it. Here is a far greater work even than preservation.

In his prophetic *Anticipations* of 1900, Mr. H. G. Wells draws a picture of the future English 'countryside' which he thinks is bound to follow on the invention of new methods of transport.

'Practically, by a process of confluence,' he says, 'the whole of Great Britain south of the Highlands seems destined to become an urban region. . . . It will certainly be a curious and varied region, far less monotonous than our present English world, still in its thinner regions, at any rate, wooded—perhaps rather more abundantly wooded, breaking continuously into park and garden and with everywhere a scattering of houses. These will not as a rule, I should fancy, follow the fashion of the vulgar, ready-built villas of the existing suburb, because the freedom people will be able to exercise in the choice of a site will rob the 'building estate' promoter of his local advantage: in many places the houses may very probably be personal houses, built for themselves much as the Tudor manor houses were, and even, in some cases, as aesthetically right. Each district, I am inclined to think, will develop its own differences of type and style. As one travels through the urban region one will traverse open, breezy, 'horsey' suburbs, smart white gates and palings everywhere, good turf, a grand-stand shining pleasantly; gardening districts all set with gables and roses, holly hedges and emerald lawns; pleasant houses among heathery moorlands and golf-links, and river districts with gaily painted boat-houses peeping from the osiers. Then presently a gathering of houses closer together and a promenade and a whiff of band and dresses, and then, perhaps, a little island of agriculture, hops or strawberry gardens, fields of grey-plumed artichokes, white-painted orchard, or brightly neat poultry farm. Through the varied country the new wide roads will run, here cutting through a crest and there running like some colossal aqueduct across a valley, swarming always with a multitudinous traffic of bright, swift (and not necessarily ugly) mechanisms; and everywhere amidst the fields and trees linking wires will stretch from pole to pole. . . .

'The same line of reasoning that leads to the expectation that the city will diffuse itself until it has taken up considerable areas and many of the characteristics, the greenness, the fresh air, of what is now country, leads us to suppose also that the country will take to itself many of the qualities of the city. The old antithesis will indeed cease, the boundary lines will altogether disappear: it will become, indeed, merely a question of more or less population. There will be horticulture and agriculture going on within the "urban regions", and "urbanity" without them.'

Mr. Wells dreamed this curious and varied region for the year A.D. 2000. We have now traversed a third of the century he allowed for its development and we have more than enough opportunity for judging in actuality what he saw in anticipation. And what an extraordinarily correct anticipation it was! But whereas it seemed pleasant to him in theory it is frightful to us in fact. The scattering of houses; the personal Tudor houses (but oh! if they were aesthetically right! If only they were *not* the vulgar and ready-built villas of the suburbs!); the gathering of houses here and there (and oh! if *only* the suggestion of a 'whiff of band and dresses' were more than a mere Riband!); the poultry-farms (would they were 'brightly neat!'); the new wide roads; the linking wires that stretch from pole to pole; the breaking down of the traditional antithesis of town as town and country as country: don't we know them! And haven't we in the light of these early results gained enough knowledge to demand emphatically that the full anticipation shall never be allowed to materialize?

4. THE PRESERVATION OF THE ANTITHESIS

In 1900 Mr. Wells regarded the breakdown of the town-country antithesis as both inevitable and desirable. Many 'town-planners', despite their pious protestations, would seem to regard it so to-day. But it is in fact only inevitable if it is desirable. Is it desirable?—that is the supreme question for consideration: all questions of details in planning are insignificant beside it.

Surely there is no need to argue the matter: surely it goes without saying that the preservation of the antithesis is desirable of itself. There is the town. There is the country. Two pure and separate forms, each capable of supreme beauty as a work of art; each serving, since civilization itself, two instinctive desires of man; each contrasting with, offsetting, supplementing the other in the most perfect, the most delightful, the most fruitful, the inevitable association. What profit is there in destroying two antithetical types of beauty for something half-way between them? Who would destroy music and poetry to establish a universal Grand (or, more likely, Comic) Opera? Who would exchange sculpture and painting for Madame Tussaud's wax-works? Even if it were certain that the resulting neutrality of town-country was capable of beauty—and surely the samples up to date have demonstrated that it is not—where is the gain? Are not two known and lovely birds in the hand preferable to a suspicious one in the bush?

And then the 'curious and varied region' of the new rustic urbanity is to be far less monotonous than the English world of the traditional

antithesis. Is it now? Is it ever likely to be? Is there the remotest possibility that one common neutrality will be more varied than the change and interplay between two antithetical forms each of which is itself capable of infinite variety? Would a perpetual twilight be far less monotonous than the sharply contrasted succession of night and day? Would a race of hermaphrodites be more varied, more interesting, more pleasing than the normal species of male and female?

'The whole of Great Britain south of the Highlands seems destined to become an urban (i.e. a semi-suburban) region'—a curious region indeed to regard with equanimity and even with pleasure in anticipation. Large areas of Great Britain where the antithesis has been destroyed and where instead of country we have already a semi-suburbia of personal houses, poultry-farms, refreshment shacks, petrol stations, wide roads, and linking wires that stretch from pole to pole—it would be curious indeed if we could regard these with equanimity and pleasure in realization.

5. RIBBONS OR VILLAGES?

How should the new population that is flooding into the countryside along all its thousands of miles of roads be housed so that the landscape may not suffer a complete change of character? The absorption of buildings into landscape does not solely depend on the suitability of their materials or the appropriateness of their design. Even the most perfectly sympathetic rural buildings placed too frequently or too evenly along the roadsides will destroy rural character.

Obviously the way to preserve the country as country is to group its buildings—to concentrate them in confined areas if they are so numerous that their being loosely scattered would negate the traditional rural character. In England the greater part of the rural population has always been gathered into villages (and the village, being but a type of small town, maintains the town and country antithesis). During the last four or five centuries, since the decay of the old manorial system of agriculture, there has necessarily always been some scattering of detached farms all over the countryside. But here in England, partly no doubt through the practice of a larger scale of farming than is common in European countries, the diffusion of rural population, each worker living on his own plot of land, that is noticeable elsewhere, has never been the rule. If the Englishman did not invent the village idea he has perfected it, and he has made his villages as unique as the countryside in which they are placed. To-day the face of England is sprinkled with a multiplicity of charming and lovely villages placed everywhere at distances of every three or four miles. To-morrow it

could be sprinkled with thousands more and yet be its lovely and unique self.

But the village idea is being forsaken by the incomers to the countryside. For the reasons already indicated, i.e. through the development of transport, the invention of the radio, the establishment of the garden-back-front-and-side ideal, and the prevalence of an ignorant nature worship, the new buildings are strung out loosely and more or less evenly, in insistent though broken lines, along the roadsides. These 'ribbons' of buildings inflict the very greatest damage on the countryside. They are the prime destroyers of country character. No matter how good and sympathetic the standard of the individual buildings may become (and heaven knows they can never be worse than they are now) the existence of the ribbon and the countryside together is impossible.

Aesthetically no type of building can be worse than the ribbon. The arguments which we have applied against certain types of trees apply here. A landscape is a thing of curves and masses. These masses may be articulated by lines so long as they are not too insistent, particularly so long as they are not too vertically insistent. Thus a hedgerow, low on the ground and rounded of itself, having little breadth and practically no vertical insistence, can fall easily into the landscape, whereas a row of poplars, of telegraph poles or electricity pylons, which have a strident insistent verticality, cannot do so. Thus a road, even a dead straight one, having no verticality and lying within the surface of the landscape, can be absorbed into the natural scene: even an avenue of trees along it may be fairly easily absorbed because of the curves and masses of its foliage. But a line of buildings along it, with its insistent, mechanical, angular verticality, appears as an abrupt interruption of the scene and not a development within it. It cannot therefore be absorbed into it. The aesthetically satisfactory siting for buildings is in a cluster form and not in a line, for the eye can then regard them not as an interruption of the landscape's surface but as a development upon it. Aesthetically the ribbon is wrong, is alien, is destructive, whereas the cluster, the village, is right and is good.

But the ribbon is as bad in economics as it is in aesthetics. There are such things as social services. New inventions for physical and social communication (i.e. motor-car, aeroplane, telephone, and television) may connect the extremities of the widest-flung ribbon, but they will not do away with the difficulties and costliness which the ribbon entails for sanitary arrangements, water supply, lighting, and such like. (And in this connexion the scattering of houses is even worse than their ribboning; and, so far as the anticipated Great British

Suburbia is concerned, it is pertinent to ask whether this new world is to revert to cesspools, wells, and oil lamps, or whether the destruction of town and country is going to be so delightful that people will endure fantastically expensive social services entailing millions of miles of sewers, water pipes, and electric cables.) Here again, then, the cluster, the village, is right whereas the ribbon and the scattering are wrong.

There is no doubt, on all the grounds of tradition, beauty, sociability, and economics, that the housing of the new population in the countryside must be by clusters, not by ribbons or scatterings. By some legal means or other (since none but legal means can be effective) the new buildings in the countryside must be grouped into villages. This will mean the preparation of great rural planning schemes wherein not only the sites, but the actual lay-outs of a multitude of villages will be pre-determined. If this is to be performed with success it is essential that the English village idea should be properly appreciated.

To begin with, it is necessary to dispel the popular conception of the village as a 'roses-round-the-door' effect, a picture-postcard beauty of little thatched cottages standing carelessly and quaintly in flowery old-world gardens by the roadside. The English village is no such thing. That conception springs from a too-believing study of Christmas cards; and much of the damage at present being wrought in the countryside results from it. Every little owner of every little bungalow in every roadside ribbon thinks he is living in Merrie England because he has those 'roses round the door' and because he has sweet-william and Michaelmas-daisies in his front garden. An amazing conception, but one that exists everywhere.

There are, indeed, numberless little hamlets that are just such a careless scattering of buildings. But these rarely contain more than half a dozen houses. As soon as any place attains the size of a village, say with twenty houses or more, almost invariably its buildings are close together and stand in continuous formation. That is the chief characteristic of the English village. Its buildings are in as close association as those of the town: houses of all sorts cluster together: the 'big house' will rub shoulders with little one-story cottages, and houses of all sizes, and buildings of all characters, stand bound to one another in a warm and pleasant neighbourliness. It would be difficult to find half a dozen among all the hundreds of villages in the country where it is not so. The detachment or semi-detachment of houses that is associated with the modern 'garden-village' has nothing to do with the traditional village. This is a point of very special importance.

The same applies, though to a rather less striking degree, to the garden. Even in hamlets and in solitary cottages along the roadside,

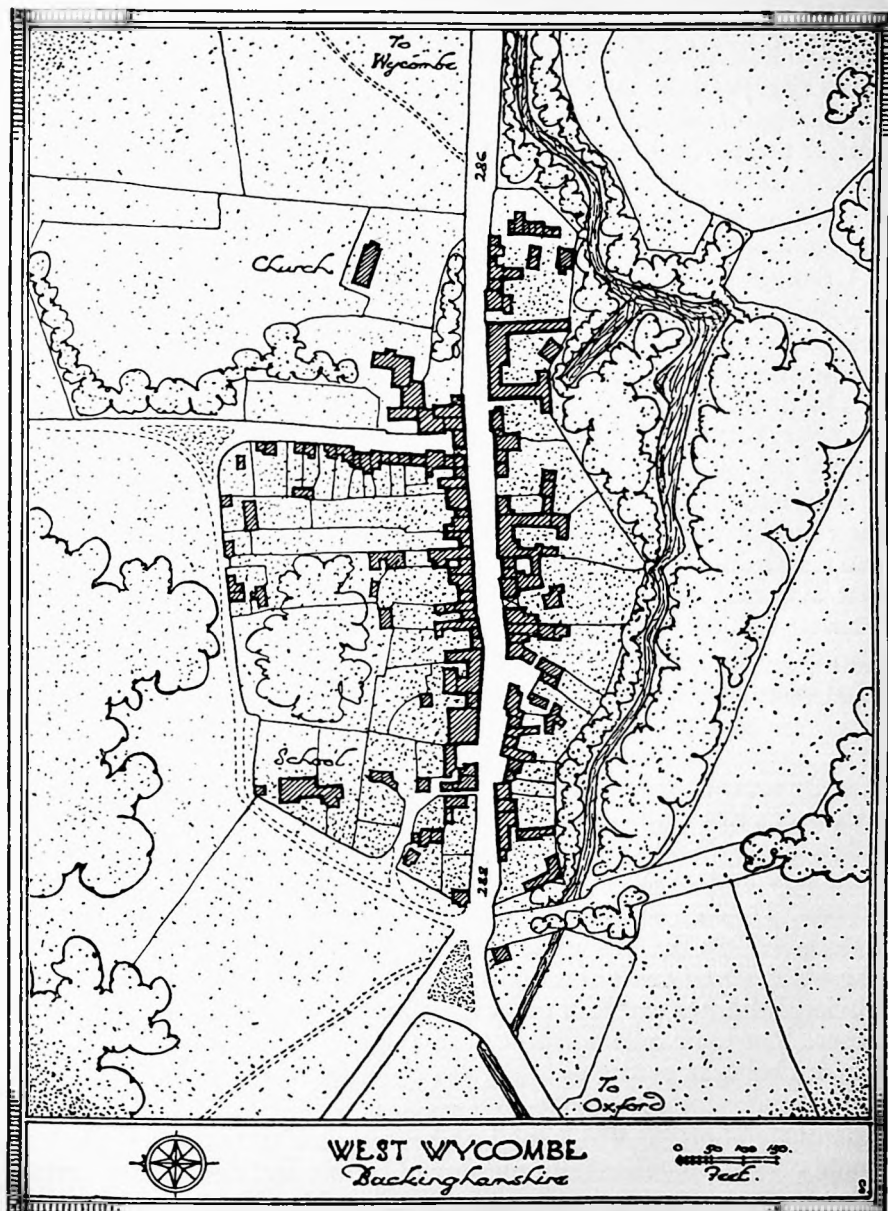


FIG. 2

the front garden is by no means the common feature it is loosely supposed to be. As often as not a rural building will stand hard upon the road's edge, with, in the case of a cottage, just a few inches of unfenced soil where a climbing plant or a few low flowers may grow. In the villages there are generally more houses without front gardens than there are with them. In many villages there are no front gardens at all, and the position roughly is that the older a village is, or the larger it becomes, the more noticeable is the absence of gardens fronting the road.

Upon these two false notions of the detachment of village buildings and the general prevalence of the roadside garden, the present conception of the village rests. If they are wrong, wherein lies the difference between town and village character?

The distinction is by no means well defined. There is such a slow gradation between the two that it is often difficult to say to which class a place belongs, and the matter of size and not of character is allowed to determine the question. This in itself only goes to show how false the romantic notions are. But nevertheless there are certain qualities that may be associated with village character. These qualities may be best discerned by examining in detail a number of selected villages. This we will do. At the same time, since we are concerned with the planning of future villages, and with the curtailment of the ribbon, we must examine the pattern that the lay-out of each village takes.

6. SOME VILLAGES EXAMINED

It is obvious at once that the general village pattern is something in the nature of a ribbon. The commonest type of village, by far, is the roadside village, which often lies about a junction of roads, stretching a little way down each of them. Here is the prototype of the modern ribbon. How do we find the old type attractive and the present one detestable? In the first place it is because of the close character and the architectural merit of the old buildings; but it is also because of the obviously limited extent of the one type and the unlimited extent of the other. The old roadside village begins definitely, ends definitely, and, besides being attractive in itself, the duration of its interference with one's enjoyment of the landscape is comparatively brief. Its length is essentially short: it was bound to be, because the country about it could only support a certain number of people and therefore a certain size of village. So there was necessarily a considerable interval between one village and the next. But the modern ribbon can, and does, go on for miles and miles. Its inhabitants do not depend on the land for their existence; there is no natural limiting agency against its continual expansion.



The Dixon Studio

6. WEST WYCOMBE



(From 'A History of the English House' by Nathaniel Lloyd)

7. MILTON ABBAS



8. BLANCHLAND



9. HEIGHINGTON

Two particularly interesting and beautiful villages of the roadside type occur at West Wycombe, which has already been mentioned, and at Milton Abbas in Dorset. The first is a natural growth, but the latter is especially interesting because it is a planned village, and because it is one of the very few old villages composed of detached buildings—(but the detachment is due to the planning; it could never have happened in a natural development). Until 1786 the old village of this locality had clustered around the Abbey, some little distance west of the present site. The first Earl of Dorchester, desiring to create a ducal mansion out of the Abbey and a lordly domain around it, found it necessary to remove bodily the entire population of that old village which was in too close proximity to him. For their accommodation he built the present village of Milton Abbas. Here standard, semi-detached, square cottages are repeated some eighteen times on either side of the village street, making some seventy houses in all. Each pair (which has but one common entrance, opening on to a common lobby) is set apart from its neighbour at a distance practically equal to its own length. Nowhere are there any front gardens—only a 12-inch unpaved strip of grass or flowers, beyond which is a narrow unmade footpath flanked by the untrimmed edge of a 30-foot strip of grass which borders the 20-foot wide roadway.

Though the cottages are modest sensible buildings which have a soft and rich appearance with their cream-washed walls and their thatched roofs, and though the plan of the village is 'composed' by the two principal buildings in its centre, the church and the alms-houses at the most important point of the gently-curving street as it winds up the 1 in 25 gradient of the little valley, and by the 'stops' which other important buildings provide at either end, the vicarage and brewery at the south and the inn and school at the north—despite these things the charm of the village depends almost entirely on its landscape setting and on the natural features which dominate it. On either side of it the hills rise steeply and the whole village is closely girdled by a continuous belt of woodland. But most important of all are the immense and lovely chestnut trees which have been planted between each of the buildings and which are now at perfect maturity. It is these that bind the buildings into a village: it is these entirely that make it the charming place that it is.

For fifty, sixty or more years before these trees attained their full enfolding beauty, Milton Abbas must have been a wearisome, unarticulated ribbon of pleasant enough little houses. Because of the special features—the chestnuts, the enclosing valley, the girdle of woods, the central emphasis and 'stops' of important buildings—

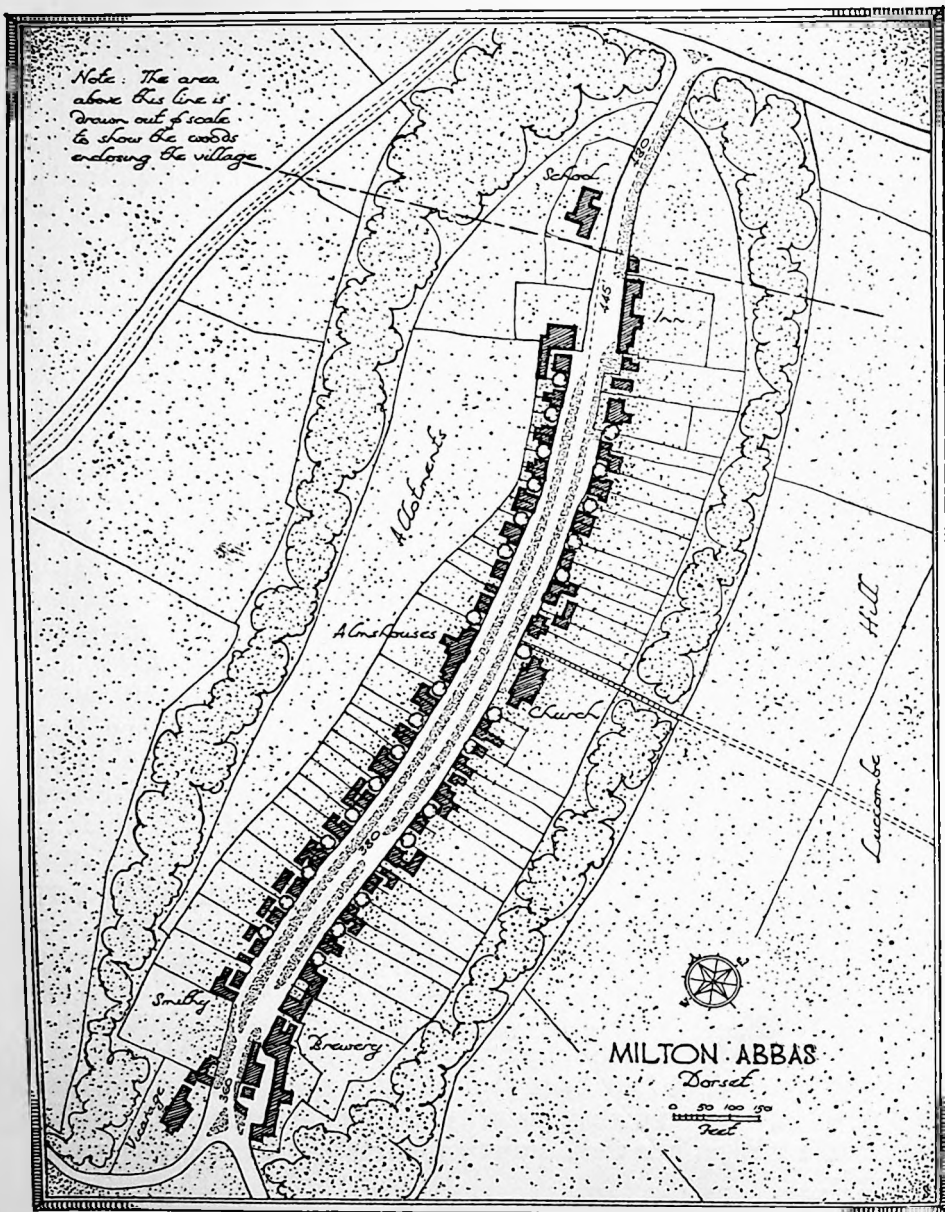


FIG. 3

because, indeed, it is fundamentally different from, though it is superficially like, the modern ribbon, it is no defence of it, nor an exemplar of what it may be. It is a special place, a pure, though lovely, accident which it would be stupidity to attempt to imitate to-day even if we were prepared, which we are not, to face its initial half-century of barrenness.

Because of its kinship with the ribbon, the roadside village, even of the universal closely-built type, is to be avoided, not imitated, in our new developments in the countryside. But though it is by far the commonest type it is not the only one. There are many other patterns that a village may take, which are illustrated by numerous examples up and down the country. We will consider several of these, taking for each type an example of a natural growth and an example of a consciously-planned settlement, and tracing as far as we can the history of each and the circumstances of its development, and describing as far as seems necessary any influencing factors of its situation and the particular points of its village character.

The most obvious pattern, and the one most sharply differentiated from the ribbon, is the square. Two notable examples of this exist within a space of a few miles at Blanchland in Northumberland and Heighington in County Durham.

Blanchland is without question one of the most striking and one of the loveliest villages in England. Its situation alone is excitingly romantic. Situated at a height of nearly 800 feet above sea-level, in the narrow wooded valley of a mountain stream, it is inaccessible from any direction save by wild roads over high rolling moors, and, rich and remote as it is, it resembles an oasis in a desert.

It is obviously a planned village, not one of natural growth. But its history is strangely obscure. Histories and guide-books give no clue to its development, though, as usual, innumerable members of that queer tribe, the antiquarians, have described every bit of battered brass and every crumbling stone found in or near the church. There was a considerable monastery founded here in 1165; and though nearly all traces of it have disappeared since its dissolution in 1539, except for some remains in the church and in the unusually large inn which was built on the ruins, it is pretty certain that the shape that the village now has was inherited from the buildings attached to the Abbey—buildings which would be grouped for fortification against the marauding bands of Scots who continually swarmed over the Border and as continually missed this secluded spot. It is likewise pretty certain that the village was almost entirely rebuilt in the early part of the second half of the eighteenth century for the accommodation of the workers in the lead mines on the neighbouring moors.

The shape of the village is almost unparalleled. Looking at it on the site, its *single squareness* is its most striking feature; yet on plan it

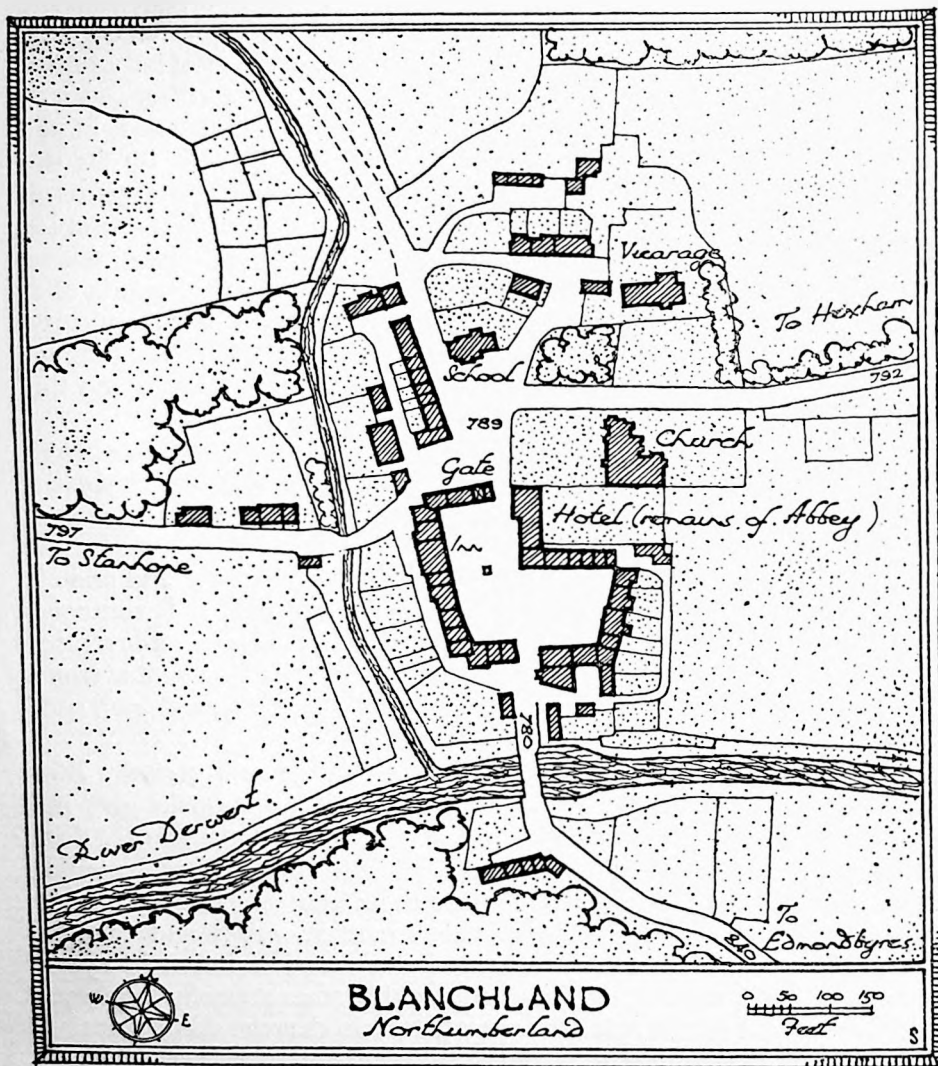


FIG. 4

shows not one square, but two, like a thick-stroked L. Its buildings are continuous and every corner is closed. There is no *through* view. On the north side, the principal entrance is under an ancient narrow gateway (now part of the post office and village shop), and the view

from it is closed partly by a small pumphouse and partly by the south side of the square. The views from the alternative northern entrance (a 20-foot-wide gap between the gateway and the old hotel buildings), and from the southern entrance (25 feet wide at the foot of an old sloping stone bridge), are also closed by the cottage buildings; and the general effect is of a calm cloistered security.

The square consists of some thirty-two cottages and two hotels. The cottages are low-pitched, two-story buildings, more or less uniform and very modest and charming in their architectural unpretentiousness. All the buildings are of a rough, warm, yellow and brown stone and the continuous roofs are covered with brown weathered stone slabs (except that of the smaller hotel which, having been roofed with slates, constitutes the one blemish in this otherwise perfect village). There is no grass anywhere: the space within the square is covered with gravel, and behind the narrow stone-flagged path in front of the cottages a little unpaved strip, some 18 inches or 2 feet wide, grows a few low brightly-coloured flowers.

Beyond the northern side of the square, the vicarage and a few cottages and farm buildings are terraced informally on the steep hill-side. And all around the land rises, first through hanging deciduous woods, then through conifer plantations, to the heather-covered moors.

Heighington in County Durham, another striking square-built village, is twenty-five miles south-east of Blanchland. Beside the latter, this village seems to have the proportions of a town, for, whereas Blanchland has a population, in the square, of only 150 or less and has an enclosed area of rather less than one acre, Heighington has a population of over 1,000 in nearly 200 houses that enclose a square of some 10 acres. Nevertheless Heighington's character is essentially that of a village, and a very earthy village at that.

It is situated just over the edge of the south-east corner of the Durham coalfield on the last hill-side of that richly undulating county as it falls away to the level valley of the lower Tees and the great plain of York. Thus it has escaped the mutilation which practically every village in that coalfield has suffered, and at the same time, through its nearness to the coal-veined hills to which its back is turned, it occupies a commanding and healthy site between four and five hundred feet above the sea. From the north side of the square there is a fine southward view framed on the one side by Richmond on its green eminence fifteen miles away and on the other by the twenty-miles-distant Cleveland Hills, with the heavily-wooded plain occupying the centre—all this seen over the tops of the houses on the south side of the square, some 30 or 40 feet below.

The western side of the square has a steady fall of 1 in 14 from north to south and the northern side a fall of about 1 in 30 from west to east,

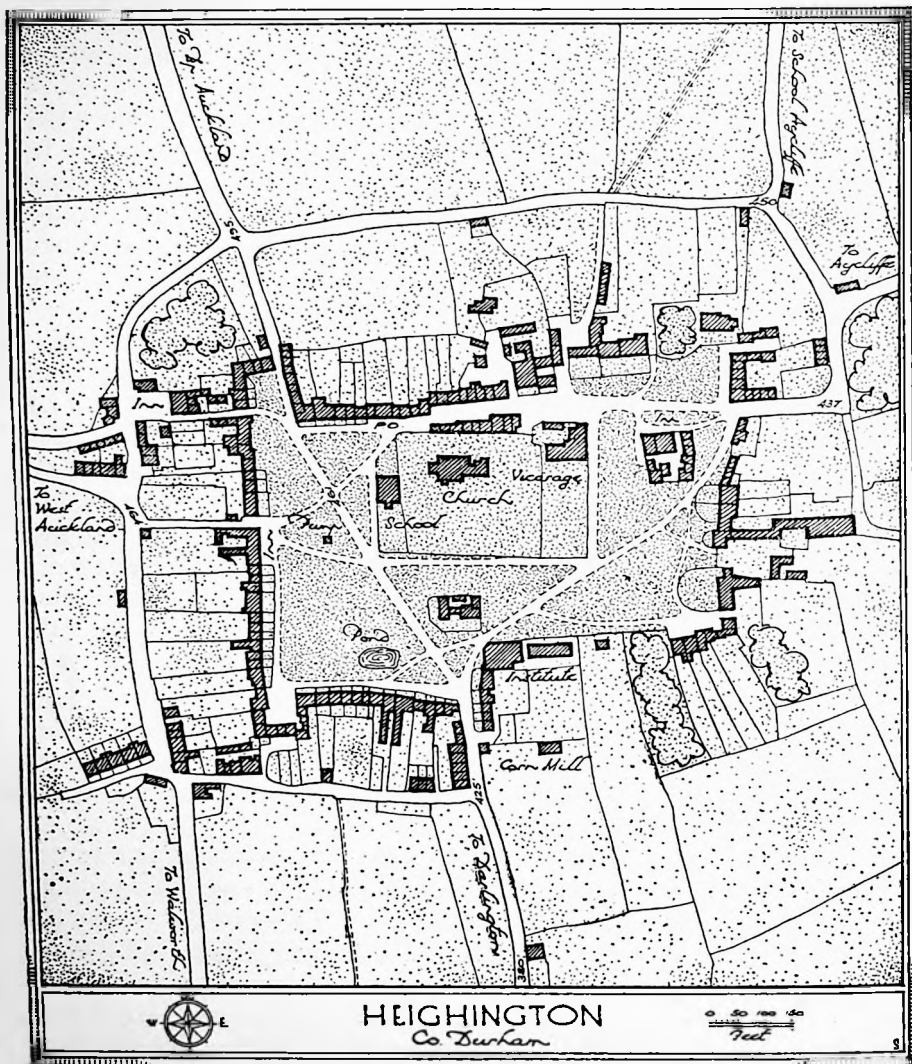


FIG. 5

but the southern side is almost level. With this conformation it is natural that the appearance of the village should be entirely informal.

The square is much more nearly perfect than that at Blanchland, but it is highly improbable that it had any artificial foundation arising

out of necessity for defence or out of any ecclesiastical or similar establishment, though here again, as at Blanchland, no definite history is ascertainable. The village is almost certainly a natural growth. The oldest houses are little more than 200 years old, though of course many older ones may have been displaced in the considerable rebuilding which seems to have taken place some sixty or eighty years ago. The road plan is extremely interesting and definitely suggests a closed village. All the entrances are very narrow, some 10, some 14 or 15, and the widest only 30 feet between buildings; and most of them are tortuous. One road has no direct entrance at all but has to make use of the back lanes which almost encircle the place and which are the most curious feature of all. None of these roads is in any way modern (though they make a most efficient by-passing system) and their existence certainly suggests something more than accident.

The square is not so emphatic in actuality as it is on plan. The western portion, being quite open and without trees, has emphasis enough, but the general effect is nothing like what it would be if the whole area had been left unbroken. It is fairly obvious that at one time it was unbroken, save for the church alone which occupied a central position of unchallenged importance. The other central buildings, the schools, the vicarage, the group of cottages and the inn on the north-east and the smaller group south of the church, are all 'squatters', some of them comparatively recent. These, though they fortunately have not enclosed much of the green, together with the great trees which surround the enclosed churchyard, have impaired the general effect very considerably; but still the effect is one of unusual charm and is wholly delightful.

The western portion is by far the most striking. Here the two corners are enclosed with a small recess, and the long west-side building line is quite regular, though the steepness of the ground has required a broken, terraced roof-line that gives interest and variety. Many of the houses have short front gardens. All of them are fairly high two-story buildings, mostly of an entirely unpretentious northern Georgian character: even those of the last century are straightforward, honest, simple affairs that conform to the general tradition. Some are in stone, some in roughish red brick, and some are colour-washed in a pleasing cream or a soft tone of pink. Practically all are roofed with the cheerful red or brown northern pantiles, the remaining few being covered with old brown-grey stone slabs.

The village stands alone in a wide countryside. So far it has escaped the worst mutilation (though within the last year or so one or two indescribably hideous subsidy-houses have been erected near one of the entrances, and an electricity scheme has reared many obtrusive

poles across the green—the first warnings, maybe, of the horror to come). For how long it will escape it is impossible to say. It is danger-

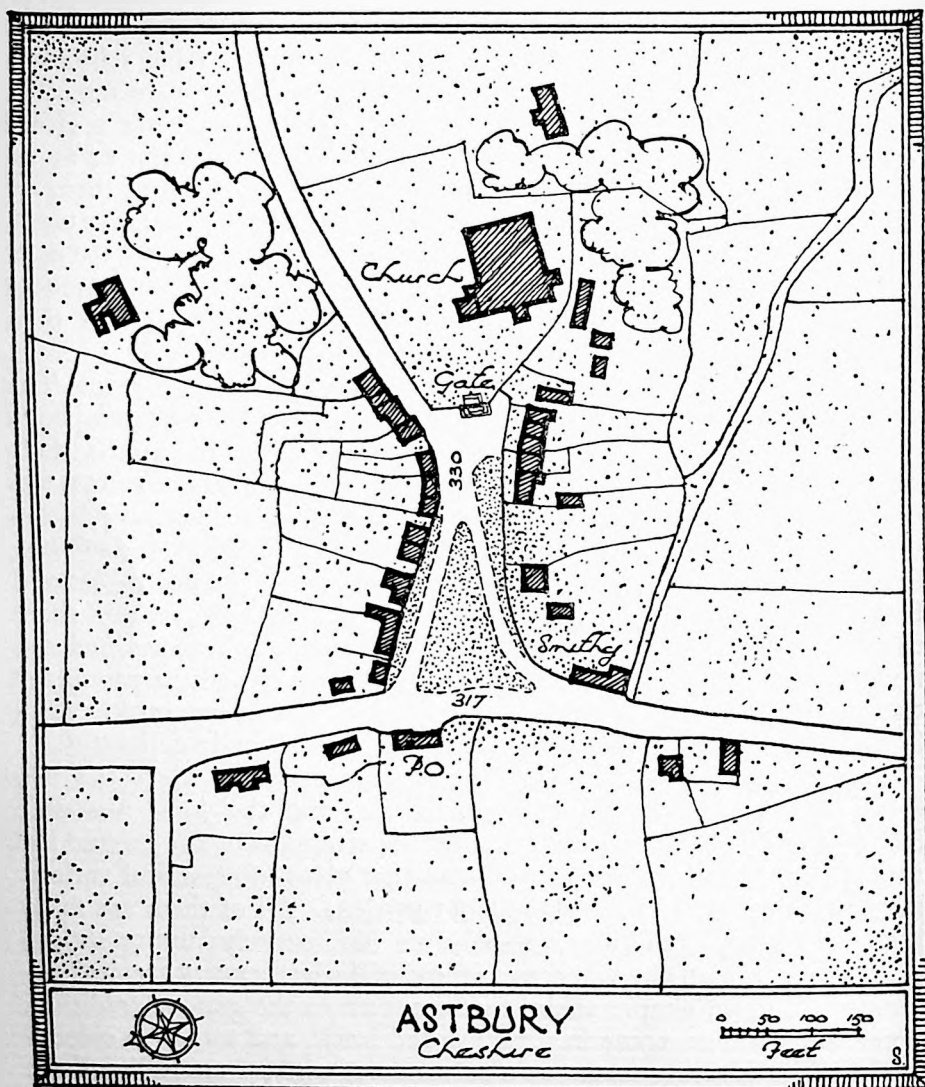
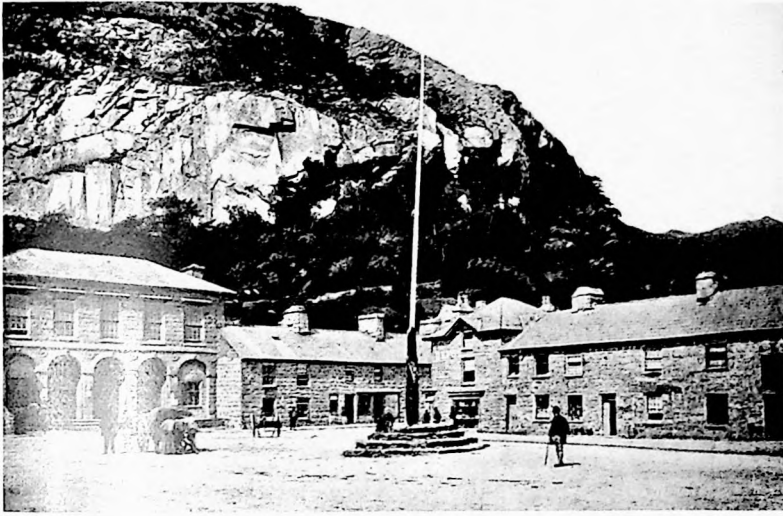


FIG. 6

ously near to populous areas. But as it stands now with its modest, earthy, yet orderly character it is an inspiring example of the housing of a very considerable country population in a village that is *of* the landscape and not merely *on* it.



'Town Planning Review'

10. TREMADOC



(From 'Town Planning in Practice')

11. ASTBURY



12. WICKHAM

'Town Planning Review'



13. CHILHAM

The next most obvious shape that a grouped village will take is the triangle, a pattern which is most likely to occur about the junction of three roads. Innumerable imperfect examples of this exist, chiefly in the smaller type of village. One such imperfect example occurs at Astbury in Cheshire. This village, a natural growth, has never been fully developed and only one of its sides is continuously built up, but, uncompleted though it is, it admirably illustrates the pattern. It consists of some twenty cottages recessed from the main road between Congleton and Newcastle-under-Lyme where a narrow country lane widens out to join it. As at Wickham, Hampshire (see p. 61), the village has avoided the main road, being situated just off it, with the result that it benefits in quietness while the road itself suffers from no local obstructions (an excellent feature, this; accidental here, maybe, but one to be definitely aimed at to-day). The green and its adjoining houses—some in the Cheshire black and white half-timber tradition with thatched roofs, some in brick, some colour-washed and roofed with tiles—slope gently upward from the main road, rising some 12 feet at a gradient of about 1 in 22, and closing together with the apex of the triangle culminating on the steps and the arched gateway to the churchyard, directly behind which rises the tower and spire of the unusually large parish church. From the main road, this village composes a charming little picture for the wayfarer. Perhaps of all the patterns the triangle has the greatest pictorial effect.

In the absence of a good existing example of a planned triangular village, perhaps we may be allowed to interpolate here a theoretic example. Fig. 7 shows this. Presuming a level site and the junction of three unimportant roads it will be seen how easy it would be to design a closed, pictorial village. The vista down each of the approaching roads might be terminated, if the axes met at a common centre, by some feature like a pump-house, a market cross, or a bus shelter, or in any case by some principal building on the opposite side, or merely by the cottages. Being a rational and friendly grouping, symbolizing the social relationship and co-operation of civilized man, how preferable would such a village be to the unpictorial and unsocial straggling of the ribbon!

These two patterns, the square and the triangle, are in direct opposition to the ribbon. There are other patterns which, though they also are in opposition, are not so definite or sharply contrasted and are therefore the more easily debased or attenuated. There is, for instance, the pattern which consists of a rectangular grouping about a *place* such as will naturally occur at the T-shaped junction of three roads. A definitely designed example of this occurs at Tremadoc in

Carnarvonshire, and an example of a natural growth at Wickham in Hampshire.

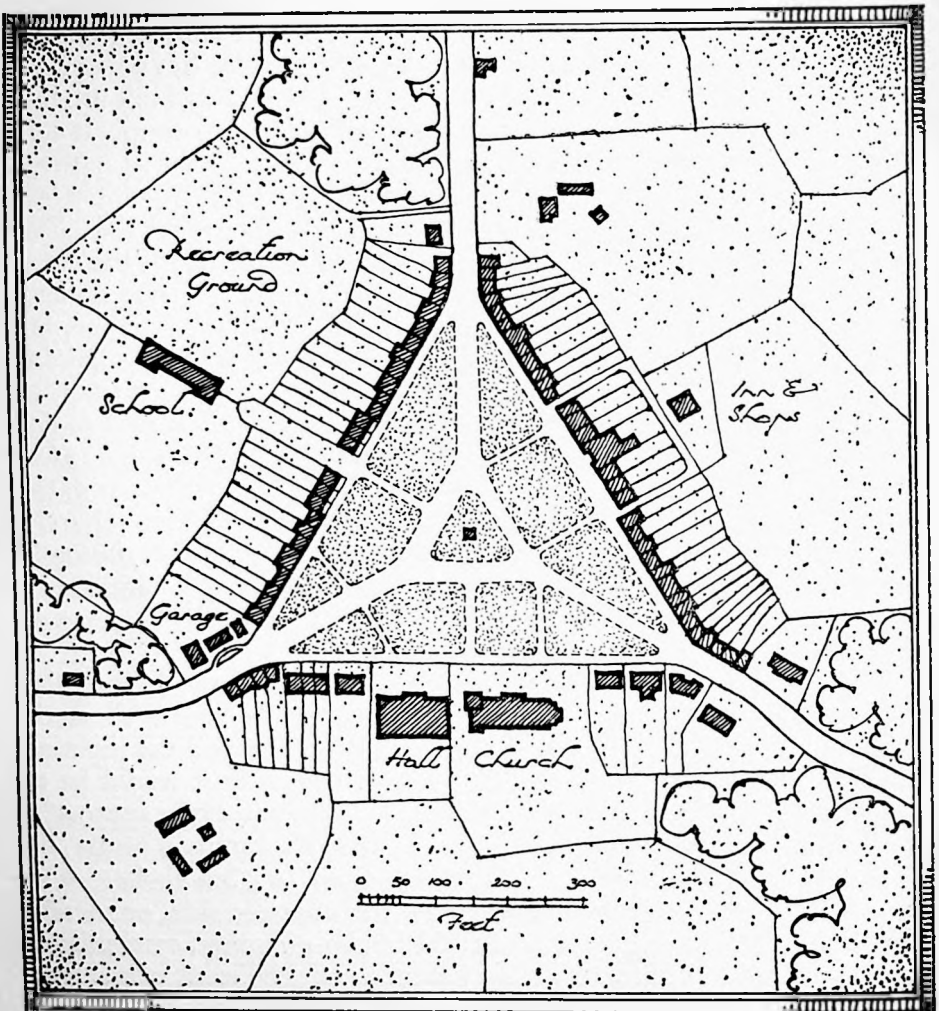


FIG. 7

Tremadoc was founded in 1798 about the time of the construction of the London-Holyhead road and the institution of the regular post with Ireland, the carrying of which was the road's primary function. Before Holyhead had been finally adopted as the port for Ireland, attempts had been made to persuade the Government to site the port on the Lley'n Peninsula in south Carnarvonshire; and if these had been

successful, Tremadoc would have acquired some considerable importance as the first stage along the London road. But though Holyhead

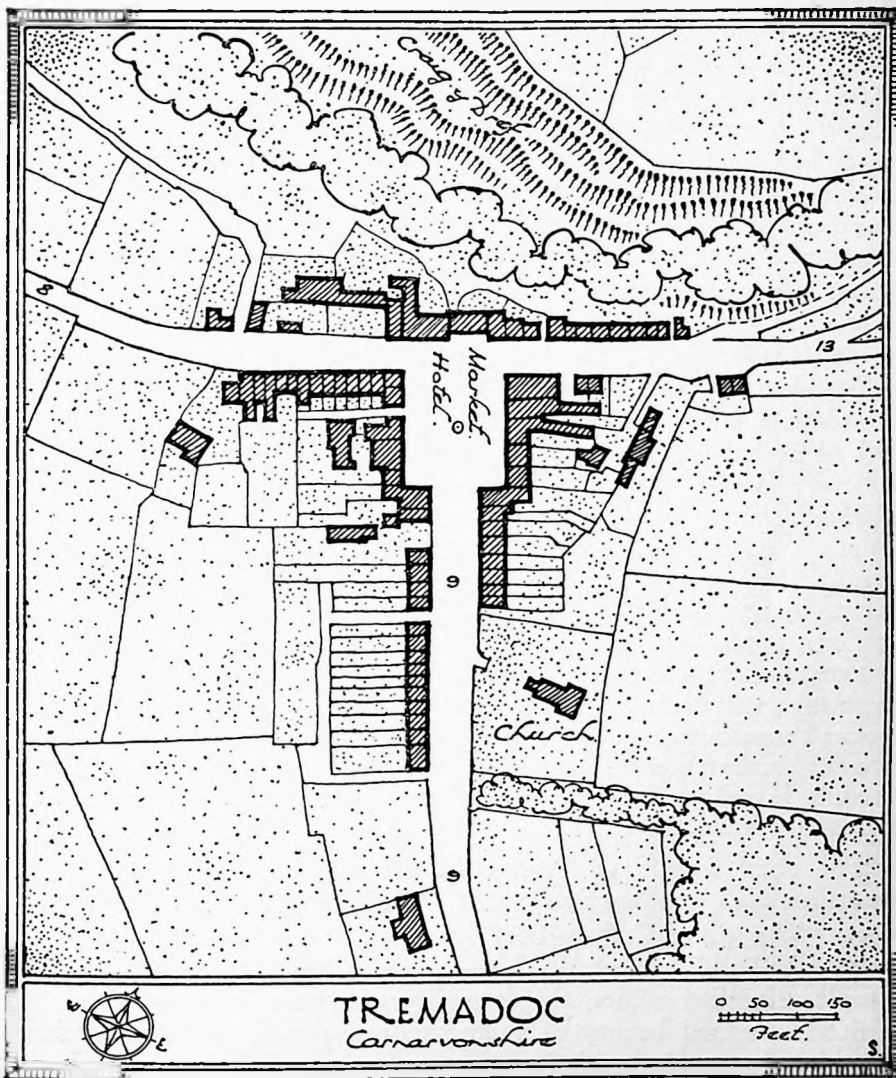


FIG. 8

and not Lleyn was made the port, the foundation of Tremadoc was still encouraged through the reclamation of some 2,000 acres of neighbouring lands from the sea. Tremadoc was to be the centre and market of the district that was extended by the reclamation. The market was

opened in 1805 and the village was grouped around the place that was formed in front of it. In 1806 the village church was built and by 1809 the village consisted of 68 houses, with a mill and a leather factory, and had a population of 303 inhabitants. Some little while after the village was established, however, its founders launched out on a scheme which was to prove the destruction of their ambitions for Tremadoc. A new scheme of reclamation from the sea was begun and by means of an embankment which at the time created national interest and was considered a remarkable feat of engineering, some 4,700 further acres were reclaimed, at a cost of £100,000. Near one corner of this embankment, at a place which was convenient for the transport of slates by sea, a new town, called Portmadoc, rapidly sprang into being and thereupon the development of Tremadoc was abandoned, so that to-day it is seen practically unaltered from its original state.

(Incidentally the building of this second embankment has other associations which it is difficult to refrain from recounting, even at the risk of irrelevance. The young Shelley had an enthusiastic finger in this pie. Here is Mr. Roger Ingpen's account of it in his *Shelley in England*.

'The Shelleys left Lynmouth in August (1812), and . . . settled at length near Tremadoc in a house called Tanyralt. Here Bysshe found a fresh field for his energies. His landlord, Mr. W. A. Maddocks, M.P., had reclaimed from the sea a huge tract of marshland in Carnarvonshire, and had built upon it the new town of Tremadoc, which had been named after its enterprising founder. At the time of Shelley's visit to the town an embankment was in course of construction to protect Tremadoc from danger of destruction by the sea. Shelley became keenly interested in the fate of the embankment, and besides canvassing the neighbourhood, he headed the list with a sum of £100, and went up to London . . . to forward his project.'

The chief feature of Tremadoc is the 'Market Square', which measures some 200 feet by 130 feet. Fronting this, and backed by the sheer rocky hill of Craig-y-Dref, are the two principal buildings, the market hall and the hotel. These, and the rest of the buildings, are simple, dignified affairs, the formality of whose lines contrast well with the rugged beauty of their sheltering cliff, while their local materials harmonize with it. The perfection of the composition is somewhat marred by the recess of the market hall being eccentric to the square, by the broken frontage west of the hotel and the unfortunate siting of the church. Nevertheless the place has a dignity, compactness and orderliness which heightens rather than destroys the village character. Here again the buildings are continuous and without front gardens.

The Square at Wickham is much less formal in its plan, as is to be expected of a place of natural growth. It is, however, almost Continental

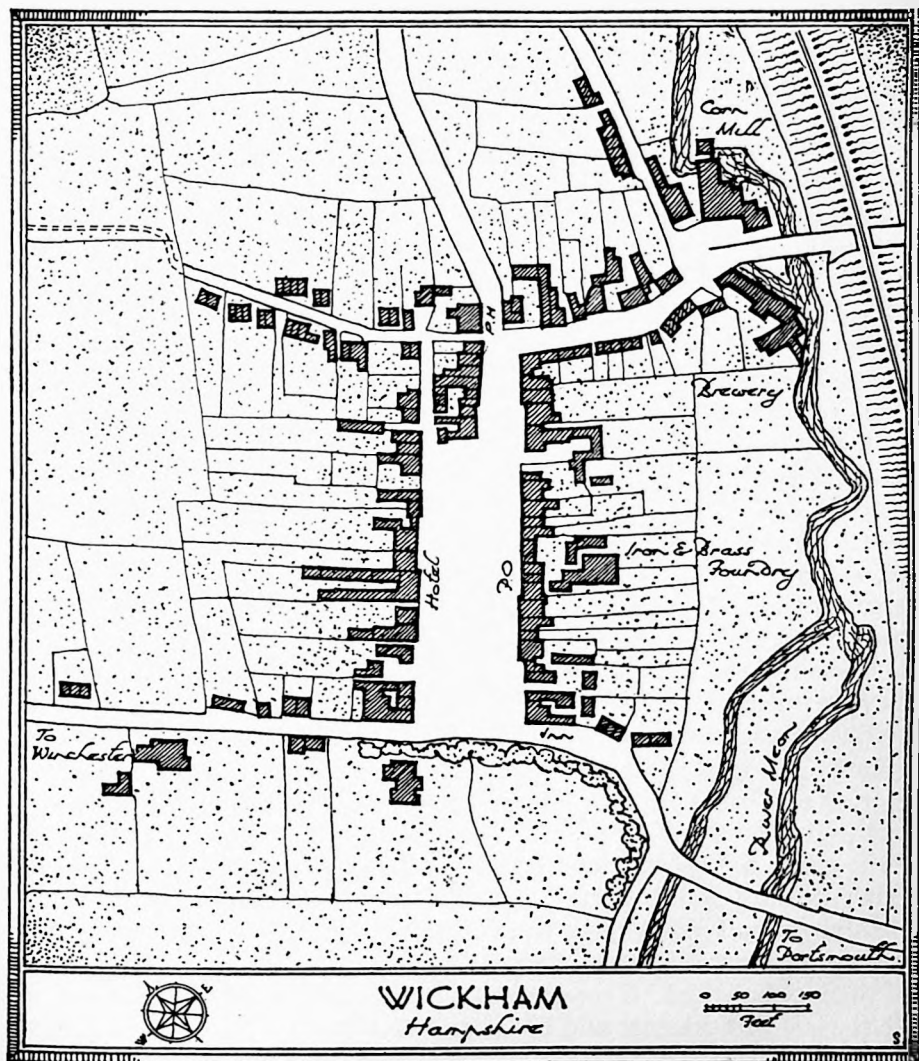


FIG. 9

in its spaciousness and in the urbanity of the buildings which enclose it: so much so that the impression is that of a small town rather than of a village. The thirty-odd houses that front on to the square are almost all large and of three or more stories in height. They are for the

most part Georgian and are built chiefly of local bricks and tiles, though here and there a brightly coloured plaster front provides contrast and a touch of gaiety. Despite the varieties of colour and form, the whole place has an appearance of completeness and a certain accidental formality which is largely due to the urbane traditions of the general architecture and in particular to the horizontality of eaves lines and cornices.

Besides the urbane completeness of this natural growth, the most interesting feature of the village is the way it has kept *off* the main traffic roads. Of these there are two, the Portsmouth-Basingstoke and Aldershot road on the east (not shown on the diagram) and the Portsmouth-Winchester road upon which the square terminates but along which it does not extend save by a scattered building or two. This is a remarkable and excellent feature which is no doubt accounted for by a special circumstance which favoured the establishment of the square in its present position, for it is believed that the area was an ancient tourney ground which existed when the village was but a few houses grouped along Bridge Street, the steep street which runs eastward from the north of the square down to the river Meon and towards the church. Whatever its origins, however, there the Square stands to-day, the spacious centre of the locality (it is 450 feet long with a width tapering from 160 to 140 feet), free from the disturbance of through traffic yet within very easy reach of it.

These two villages are of the normal type of English village in that they are independent places, living their individual lives as the social and marketing centres of free communities unattached to any dominating agency. Many of the most attractive villages in the country are, however, of another type; they are, or have been, dependent on some great institution for their existence. They may have been dependent on some castle for defence in warfare—and many beautiful examples of this type exist in the Border counties, such, for example, as those at Bamburgh and Warkworth in Northumberland. Or they may have been dependent on some mansion or great estate for the employment of their populations. Two examples of this latter class are notable in Harewood in Yorkshire and Chilham in Kent.

Harewood is one of those planned villages (like Milton Abbas) which owe their existence to the social sensitiveness of some grand seigneur who bodily removed to a greater distance an old village that was uncomfortably close to the manorial windows.

Prior to 1760 an old village called Gawthorpe had clustered about the church within the park of Harewood House. This village the owner of Harewood, Mr. Edwin Lascelles, afterwards the first Earl of

Harewood, desired to remove, and the idea occurred to him of making the new village by which he had decided to replace it act as a formal

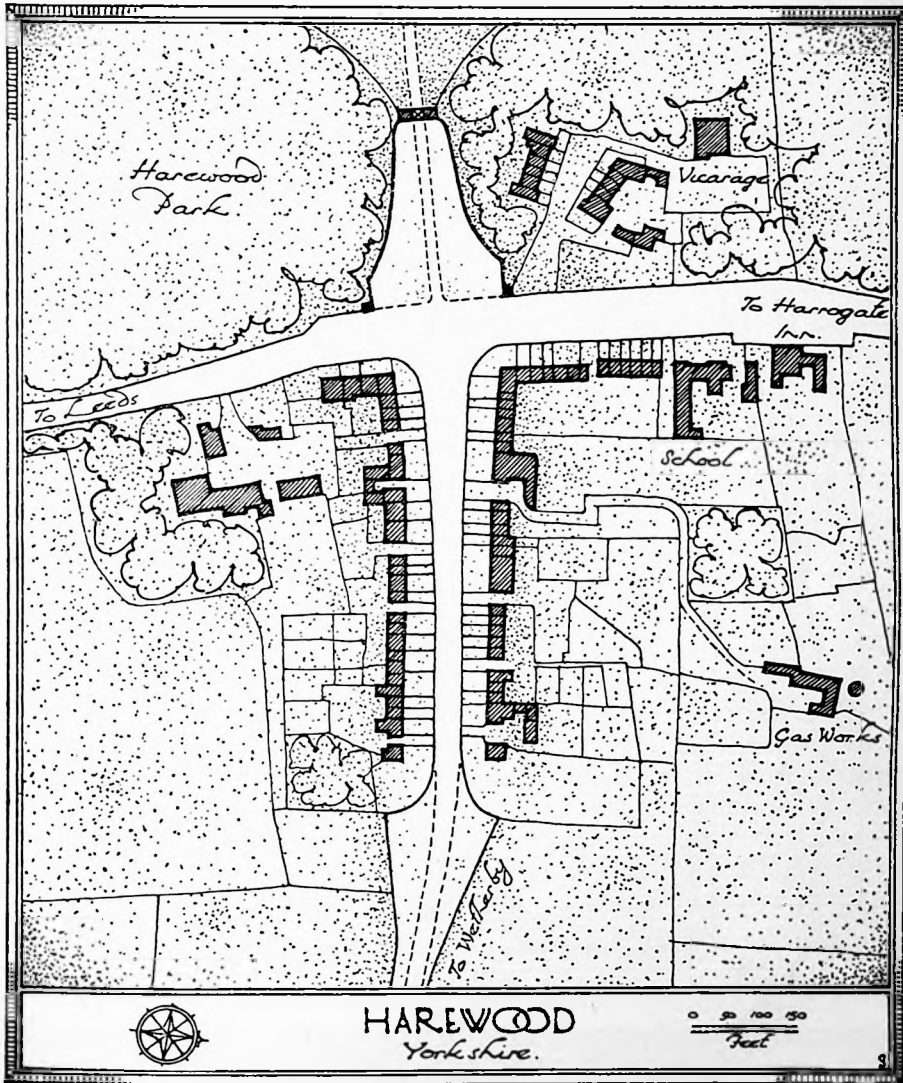


FIG. 10

entrance to his park. For the purpose of carrying out this work he employed John Carr, of York, a notable northern architect, and by him the present village of Harewood was built in 1760.

The village is cleverly designed to suggest a progression towards a

centre of importance. The approach road from Wetherby runs first through a fine straight avenue of trees for over a mile. Then the avenue

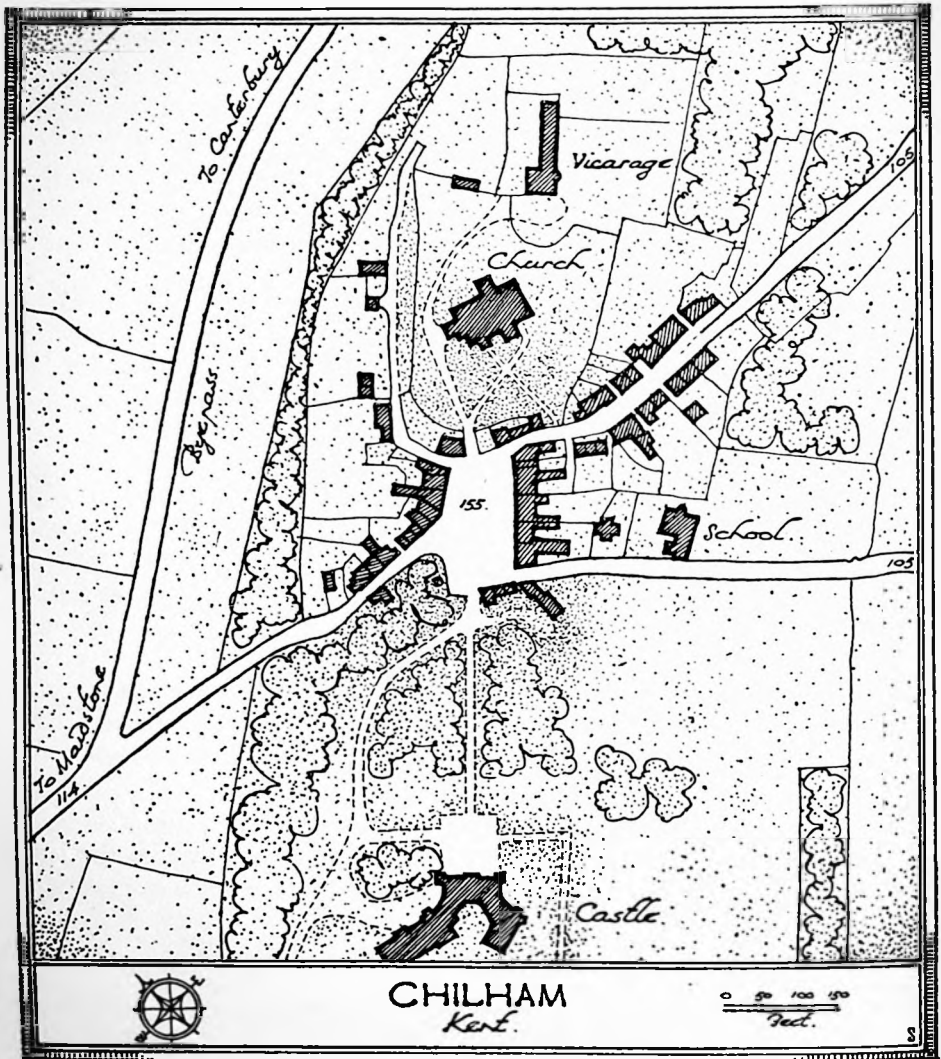


FIG. 11

comes to an end, and with the village in sight the views are unobstructed. At the entrance to the village the road widens out, then closes again, with the suggestion of a gateway, and from there the houses that are grouped on either side of it widen slightly, from a distance of 120 feet apart to 150 feet, towards two great pillars behind

which the park wall and large bordering trees curve inwards again to the building that has dominated the whole vista down the village street, namely the arched entrance lodge of Harewood Park.

The buildings of the village have the typical modest, eighteenth-century formality. The houses, of which there are about fifty on this entrance, are set behind fairly deep gardens and are built in blocks of varying numbers. They are uniform in character and height, with a slightly classical flavour, and their stone walls and slab roofs have a solid native quality and a quiet unpretentious dignity that mirror exactly the true village idea.¹

While Harewood is a planned development, Chilham is one of a natural growth, and is in the softer southern tradition. It clusters on the top of a little hill, surrounded by miles of hop gardens and orchards, some six miles south-west of Canterbury, just off the main roads from Ashford and Maidstone. One side of its little irregular gravelled square, which measures about 100 feet by 200 feet, opens on to the entrance gates of Chilham Castle; the other reveals a glimpse of a fine old typical Kentish church. It is entirely informal both in its shape and in its buildings. Most of its buildings are very old and very beautiful with their irregular half-timbered or soft-textured brick fronts and their lovely golden-red moss-grown roofs. It is one of those most English of villages which should be preserved intact without blot or blemish. It could never happen again.

Here we have seen two examples of each of five different types of village. There are hundreds like them up and down every shire in the country. There are no doubt scores that would better have merited our attention than those we have considered. Such are the wealth and variety of our villages that one can have personal acquaintance with but a few of the different types; and their beauty and interest are such that a proper consideration of them would require at least a volume to itself.

7. THE ARTIFICIAL AND THE NATURAL

The idea of building planned villages up and down the country will undoubtedly suggest, to many people, an artificiality that is alien to the rural spirit. Rural effect, these people will maintain, can only be achieved through unconscious natural growth.

Why, it will be asked by these lovers of the 'natural' and these haters of the 'artificial'—why cannot we imitate in our new developments

¹ The notes on the villages of Milton Abbas, Tremadoc, Wickham, and Harewood are based on articles by S. D. Adshead, R. D. Jones, S. C. Ramsey, and W. A. Eden, respectively, in the *Town Planning Review*.

the irregularities that are so delightful in the old natural growths? The natural village, like the natural countryside, has no regularity, no straightness, no uniformity; it is full of unexpected deviations from the obvious, and in that lies all its character and charm. That is the old, old story; the old love of the natural and the fear of the artificial that has led us into the horrors of the 'landscape garden' and that led Camillo Sitte and the Germans of a generation ago into a wilderness of barren imitation of the 'picturesque' in town-building. There, indeed, is the exact parallel. Camillo Sitte saw in picturesque 'natural' medieval towns a beauty that he could not find in later architectural uniformity. He set out directly to copy in modern cities the irregularities, the fumbings, the purposeless staggerings of those old towns. Where the old builders did not plan at all he planned an imitation of their lack of planning—with such lamentable results that the whole of his theory stood condemned by his works within a few years. Of all artificiality the most barren and depressing is the conscious imitation of the unconscious and 'natural'.

And as for natural growth itself, what does it result in to-day?—in all that is evil in the countryside, in the ribbon, the petrol filling-station, the refreshment shack; in the incongruous, the fundamentally unnatural. We have lost the power of the sympathetic direction of natural growth: we have lost that instinct towards fitness and modesty which made beautiful the slow accumulative works of our forefathers. Satisfactory natural growth is unattainable: conscious pre-determined imitation of natural growth is abominable. Planned grouped development on frank, straightforward lines is the only possible way of building in the countryside to-day.

But that we need have no 'artificiality' to fear from planned developments, so long as they are carefully planned, the examples already cited surely prove. Blanchland, Tremadoc, and Harewood all have the true village character, and (unlike Milton Abbas) they had their pleasantness from the beginning: they are not places which have got their charm only from the passage of years and the softening effects of natural attributes. So to-day we can, if we will, build villages which will have no artificiality even on the first day they are completed.

Artificiality in the countryside simply means incongruity. Even formality there, if it is quiet and unpretentious, can be in sympathy with the natural background and need have no suggestion of the mechanically artificial. The square at Tremadoc emphatically proves this. It is definitely formal, and that in the face of the wild informality of the rocky height under which it shelters. But its formality is humble, not flamboyant, and the materials in which it is created have nothing

alien or mechanical in them. Even a natural growth like Wickham has a pervading atmosphere of formality, and it is undoubtedly true that of all English building styles the Georgian, which is by far the most formal, is the most sympathetic to the countryside—as it is the most urbane in the town. Similarly, uniformity does not necessarily suggest an alien artificiality. Blanchland and Harewood both have uniformity in their buildings, but they are as rural as any natural village.

The rural feeling of the village does not depend on any of those things that are popularly associated with it, flowering gardens, irregular, informal, and quaint buildings, and so on. It seems to depend on much smaller and more subtle things, upon a certain modesty, a certain lack of the smooth, mechanical finish of the town, and above all upon the harmony of the *material* of its buildings with the countryside. There is nothing to fear, then, from the *planning* of villages in more or less formal patterns like the square and the triangle. And there is everything to gain, since only in this way can we stay the wholesale destruction of rural character by the ribbon.

8. ASSIMILATION OF BUILDINGS INTO LANDSCAPE

Though most of the future buildings in the countryside may eventually be grouped into pre-planned villages, there must continue to be a certain scattering of them in farms and detached cottages. But wherever they are, whether grouped or not, they must, if they are to be absorbed into the natural scene, show a certain feeling for the forms and colourings of the landscape in which they are placed.

The assimilation of a building into the natural scene depends on two things: on the congruity (or harmony, or unity) of its artificial materials with the surrounding natural materials, and on the form or silhouette of the building within the general form of the surrounding landscape. So far as assimilation is concerned, these are the things that chiefly matter. The success of the building as an architectural composition through the harmonious relation of its various parts, though it is most desirable in itself and may give an added delight to a country building, is but a secondary, though nevertheless important, consideration.

What makes for congruity in materials? It is difficult to say. It is so easy to generalize falsely that one is chary of generalizing at all. It is easy, for instance, to say that the old country buildings harmonized with the landscape because they were literally *of* it, the materials of which they were generally built being literally a part of the surrounding country, such as the actual raw material from quarry or cornfield or the converted material of the local earth burnt into brick or tile. But

though they may be of the earth and from under it, that does not necessarily mean that they find any echo in the natural colourings of the fields and hills surrounding them. Where, as in certain hill districts, the buildings are of materials identical with visible outcropping rocks, the closest harmony naturally exists between buildings and natural landscape. Even where there are no visible outcrops and the scene is coloured only with the various greens of meadows, pastures, woods, and fells, the stone buildings of all hill countries find some echo and a direct justification in the materials of the field-enclosing walls which are but the stones collected from the surface of the country when the land was claimed from the wild. But on the whole such directly echoing harmonies of colour are unusual. There is no echoing harmony of red brickwork, red tile, flint wall, stone wall, or many of the other various local materials, in the lowland landscapes of half the country. And in any case a direct echo may, indeed, be unsatisfactory in that it may produce a dullness and lack of emphasis.

Wordsworth, in his *Guide to the Lakes*, a book which contains a stimulating consideration of many matters of rural design, based as it is on his poet's close and illuminating observation, discusses this difficulty apropos of a dictum by Sir Joshua Reynolds.

'Reynolds used to say, "if you would fix upon the best colour for your house, turn up a stone, or pluck up a handful of grass by the roots, and see what is the colour of the soil where your house is to stand, and let that be your choice." Of course, this precept given in conversation, could not have been meant to be taken literally,' says Wordsworth. 'For example, in Low Furness, where the soil, from its strong impregnation with iron, is universally of a deep red, if this rule were strictly followed, the house also must be of a glaring red; in other places it must be of a sullen black; which would only be adding annoyance to annoyance. The rule, however, as a general guide is good; and, in agricultural districts, where large tracts of soil are laid bare by the plough, particularly if (the face of the country being undulating) they are held up to view, this rule, though not to be implicitly adhered to, should never be lost sight of;—the colour of the house ought, if possible, to have a cast or shade of the colour of the soil. The principle is, that the house must harmonize with the surrounding landscape: accordingly, in mountainous countries, with still more confidence may it be said, "Look at the rocks and those parts of the mountain where the soil is visible, and they will furnish a safe direction". Nevertheless, it will often happen that the rocks may bear so large a proportion to the rest of the landscape, and may be of such a tone or colour, that the rule may not admit, even here, of being implicitly followed. For instance, the chief defect in the colouring of the Country of the Lakes (which is most strongly felt in the summer season) is an over-prevalence of a bluish tint, which the green of the herbage, the fern, and the woods, does not sufficiently counteract. If a house, therefore, should stand where this defect

prevails, I have no hesitation in saying that the colour of the neighbouring rocks would not be the best that could be chosen. A tint ought to be introduced approaching nearer to those which, in the technical language of painters, are called *warm*: this, if happily selected, would not disturb but would animate the landscape.'

The house must harmonize with the landscape. That is the golden rule upon which everybody is agreed. It is easy to formulate it, because it is so obviously true; but it is difficult logically to analyse it. Wherever does this harmony lie? It can be said at once, in colour and in texture. But the harmony of colour!—that indeed is a subtle business!

If by the harmony of colour one infers a question of pure aesthetics, there are very few people outside the artists who deal in colour, i.e. painters, who are capable either of discussing or of appreciating it. Exactly what shades of what go with exactly what tints of what else to produce an aesthetically good relationship, is a question which leaves the ordinary person in a state of utter bewilderment. To begin with, there is a definite clash between theories of pure aesthetics and certain natural conditions. This is admirably illustrated by an anecdote of Professor G. M. Trevelyan's: 'A living artist of high name and accomplishment, once told a friend of mine, then his pupil at the Slade, that he should not paint bluebells in grass because green and blue make a cacophony of colour.' In the light of such aesthetic theories what is the ordinary person to do? And it is no mere question of making a fixed and final composition of a few colours as in a painting or in a dress. A landscape is a matter of confused colours which change not only with the seasons but from day to day and from minute to minute with the position and strength of the sun, the passing of a cloud, the direction and force of a wind, and with the humidity and radiation of the atmosphere. How to arrange a pattern of colours that will harmonize with a changing landscape under these changing conditions? Against what background does a red roof create an aesthetic disharmony? A few painters may know, but the vast majority of people never can know, not even those with the most tender feelings for rural beauty. So far as aesthetic considerations are concerned, probably the most we can say is that certain crude colours are repulsive in themselves—repulsive anywhere—certain crude reds and yellows particularly, and certain half colours that find no echo in natural tints. These crude colours which for some reason or another, perhaps because of their lack of subtlety, are unpleasant to our twentieth-century *English* eyes—quite probably they might be excitingly pleasant to a Negro's—we should avoid in the countryside as elsewhere. Soft, warm tints are

likely to give the greatest colour harmonies. And that is about all we can say as regards the aesthetics of the question.

But in speaking of the harmony of colour, do not we generally mean the harmony of tradition? Bright-red brick is delightful in East Anglia. From a standpoint of pure aesthetics it *might* be delightful in the Cotswolds. But our traditional sense (which is fairly common while the subtle aesthetic sense is not) would be outraged by it, when we saw it there in juxtaposition to the soft-toned stone of the traditional Cotswold villages. We say that the colours of the old buildings invariably harmonize with their surroundings. Had our forefathers a keener understanding of colour relationships than we have, or are these invariable colour harmonies that we find in old buildings simply the result of universal miraculous accident. Almost certainly neither. The harmony arises partly out of our sense of tradition and partly out of the mellowing that time has produced.

Lacking a sound theory of colour aesthetics, therefore, we can find guidance for colourings in the building traditions of the countryside. By following these traditions we will produce no incongruity, nor shatter any existing harmony. In many landscapes, tradition itself shows a wide enough variety: outside a few special localities, generally hill districts, traditional builders have successfully used brick and stone, tile and slate in close juxtaposition. We may do so, too, if we are careful of the tone and texture of our materials.

Texture is probably as important as colour. The greatest incongruity between artificial and natural forms exists where the artificial forms have a hard mechanical finish. The manufactured materials used in old buildings were all roughly and unmechanically 'home-made', and the very defects of their manufacture prevented any obvious clash between nature and art. Even when a smooth mechanical finish was inherent in the manufactured article, as in glass, its worst results were minimized by mechanical limitations which permitted the manufacture of such small continuous bulk that the scale of the clash between art and nature was kept small, as in the windows where the hard, smooth finish of the glass was offset, and the whole window given texture, by the glazing bars that were necessary to hold the small panes together. Thus the old buildings of the countryside, even when they were new, showed no mechanical artificiality: the dull, 'matte' surface of the materials was in direct and complete harmony with the texture of grass, trees, earth, sky, and all natural things.

To-day we have brought both the machine and its product to mechanical perfection and so we manufacture building materials of the highest 'finish', the most perfectly mechanical exactness, the most

obvious and unashamed artificiality. Machine-made brick and tile, or substitutes even for these, are produced with a metallic polish which makes them as alien in the natural landscape as burnished steel. Such materials can never harmonize with the natural scene: no matter how long they exist they will stand unassimilated, creating the wildest discord, producing the completest incongruity.

The value of a natural unmechanical texture lies not only in its immediate sympathy with and its immediate absorption into the landscape, but in its ability to accept and be improved by natural agencies. A material of natural texture can indeed be said to be alive: it matures; is purged of original crudities; grows rich and mellow with age; gains beauty and character with the passage of the years. But a mechanical material is dead: it is made, it remains, but it has no life, no development. Alien from the beginning, it remains always unmodified, unchanged, for ever incongruous.

In many localities to-day it is impossible to get materials of a colour and texture that will harmonize with the landscape. Here, and in the case of any uncertainty anywhere, the difficulty can be avoided by the use of a colour wash on wall surfaces. In a thinly populated district it is often desirable, for the humanizing of the landscape, that colour wash should be used even where there lies at hand an abundant supply of a perfectly harmonious building material. Every one who has travelled in some of the dales of northern England knows what a thrill of pleasure is produced by the sight of scattered farmsteads whose houses and out-buildings, nestling on the hill-sides, are all coloured in a soft pure white. Wordsworth, in his *Guide*, devotes several pages to a wholesale condemnation of white as a colouring. He allows that in some situations among trees white may be delightful, but he will have none of it in a mountain district. He justly mentions that white destroys the gradations of distance, but unjustly, and too fancifully, dwells on how 'five or six white houses, scattered over a valley, by their obtrusiveness, dot the surface, and divide it into triangles, or other mathematical figures, haunting the eye, and disturbing that repose which might otherwise be perfect'. He may possibly be right as regards the Lake District, but he is certainly wrong in condemning white in all mountain districts. There is a great estate, Lord Barnard's, in south-west Durham, where the proprietor insists on his tenants maintaining their buildings in a pure, continually refreshed, white colouring. The whole of that countryside is a joy to the least sensitive eye. On the undulating foothills of the Pennines, the farmsteads and cottages stand out in the richly-timbered landscape like great white birds that are resting from flight. But it is in the high dales that they

are most beautiful. In upper Teesdale, above the great waterfall of High Force, and above the tree line, the narrow treeless valley that is shut in by smooth rounded fells is a picture of sheer delight, humanized and brightened as it is by the widely-spaced white stipple of its farms. Any other colour here would be wrong: the picture attains to perfection—and it affords not only a confutation of Wordsworth's theory but an outstanding example of the benefits of the once common but now rapidly disappearing guardianship of amenity that has been exercised by the great landowners).

To sum up this question of harmony in colour and texture in rural building materials, then, the three outstanding principles of design are: (1) to continue the traditional colourings of the buildings in particular localities; (2) to avoid always a mechanical texture in materials; and (3) where materials of a sympathetic colouring and texture are no longer obtainable, to cover inharmonious materials in wall surfaces with a warm, soft-toned colour wash.

Besides depending upon the harmony of its materials, the assimilation of a building into the natural scene depends upon the form or silhouette of the building within the general form of the surrounding landscape. A landscape, as we have seen, though itself it is a thing of curves and masses, of rounded hills and hollows and trees, can absorb into its form unrounded masses and straight lines so long as these are not too vertically insistent, and so long as they are well secured within the surface of the landscape and can be regarded as a development upon that surface and not an interruption of it. Now, a house necessarily has an angular form. The first principle in the design of its silhouette should therefore be the avoidance of a vertical insistence. An emphatic horizontality should be aimed at. For this reason the bungalow, despite the abuse it has suffered (though it deserves unstinted abuse in the town) has a form which can be easily assimilated into the natural scene. The one-story cottage is very characteristic of the English countryside and, though the bungalow now stands for all that is vile and contemptible (because of its degradation through shoddy materials and bad design, however, not on account of any inherent fault, though certainly because of its large area it has a roofiness that is difficult to manage successfully), the bungalow could, in capable hands, and where detached buildings are necessary, find as easy a place in the landscape as the one-story cottage has always found. That it can ever now escape the bad traditions that have attached to it is, perhaps, almost too much to hope; but at any rate its possibilities of good treatment should not be ignored.

The larger buildings in the old countryside, the farm-houses and



14. COLOUR, TEXTURE, AND SILHOUETTE

C. P. R. E.



15. VERTICAL EMPHASIS



16. HORIZONTAL EMPHASIS

mansions, almost invariably sat comfortably within the scene because they were anchored to the ground by boundary walls and by the buildings of various shapes and sizes, barns, byres, stables and the rest, which clustered around them and which neutralized any tendency towards verticality that the principal building might have had by making it seem but the culmination of a steady growth out of the surface of the landscape. This anchoring of a building so that it seems slowly to rise rather than suddenly to leap out of the surface is of very great importance, and though the country house of to-day is unlikely to have any buildings but a garage clustering about it, it can still be secured into the scene by having a curtain wall linking its façade to the boundary fences or rising gently somehow or other out of the ground. How often to-day do we see houses stuck up in fields, stark and insecure like so many Aunt Sallys, with an insistent verticality and never a suggestion of a friendly understanding with the earth out of which they spring. Not all the flowers and shrubs and crazy pavements in the world can help these buildings to be absorbed into the natural scene.

This avoidance of vertical emphasis, this suggestion of firm and gradual anchorage, is particularly necessary in buildings erected against the sky-line. 'The craving for prospect', says Wordsworth, 'which is immoderate, particularly in new settlers, has rendered it impossible that buildings, whatever might have been their architecture, should in most cases be ornamental to the landscape; rising as they do from the summits of naked hills in staring contrast to the snugness and privacy of the ancient houses.' But it is not only the hill sky that must be considered. A hilly or undulating country is indeed the easiest for the avoidance of a sky-line silhouette. There practically all buildings except those on the very ridges can avoid it. It is on the plains that the silhouette has most to be considered, for there it is only in the lee of a wood that the sky-line can be avoided. There of all places a softness of outline and a horizontal emphasis are essential. And of all effects to be avoided against any sky-line the chief is that setting of identical blocks at identical distances apart which is so common in all modern housing, in the ribbon, the housing scheme and the garden-city. Of all sky-line silhouettes that is the most disastrous.

A word only is necessary on the question of detailed architectural design, and that concerns the use of meretricious ornament. Never at any period of our architectural history has there been such gross vulgarity in applied ornament as that which is to-day indulged in by the jerry-builder and the less reputable architect. The mixing of materials for variety, rough-cast placed over brickwork, tile ridges and hips on slate roofs; the use of gilded lead and coloured glass effects

in windows and fanlights; black and white and other vile colour schemes in painted woodwork; sham half-timber work, and all the rest of the trashy effects that produce a feeling of physical sickness on any sensitive person: shameful and abominable they are anywhere, let

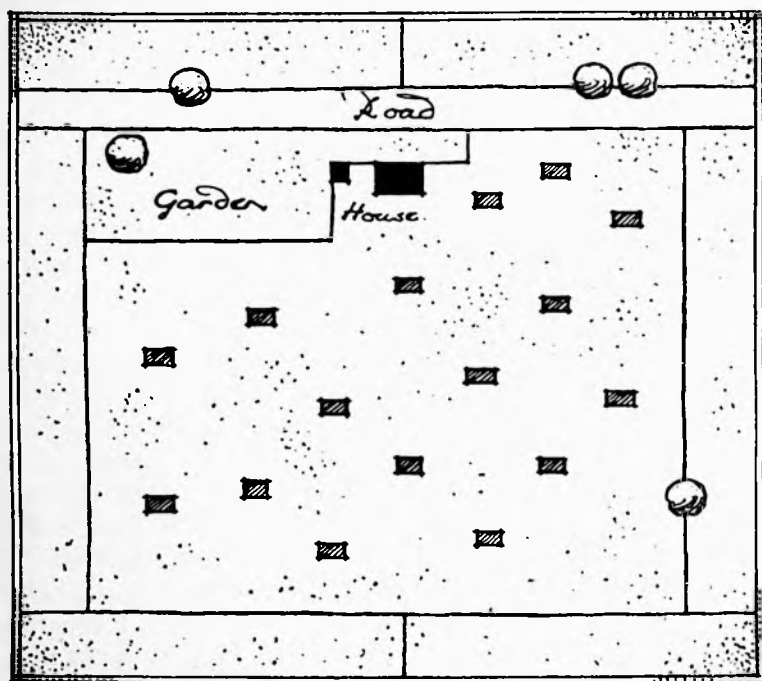


FIG. 12. Poultry-farm, as it usually is, with wooden fowl-houses scattered irregularly about the whole of the 'farm'.

alone among the lovely enduring majesty of the countryside. In the name of all that our civilization means let us get back to plain, straightforward, honest-to-God building once more.

9. POULTRY-FARM AND PETROL-PUMP

There are two types of buildings in the countryside, both new-comers, that demand some special consideration. These are the buildings of poultry-farms and of motor service-stations.

Poultry-farming is not yet the widespread industry that we are assured it will become. There are traces of it in most parts of the country, but only in a few districts is it developed on the intensified scale that we are to expect in the future. In those districts, however, it has assumed such a nightmarish aspect that people familiar with it

there rightly regard it as one of the most pregnant of all the disfiguring and destroying agencies.

No one who is not familiar with a region of intensive poultry-farming can have any conception of the devastating effects on rural amenity of

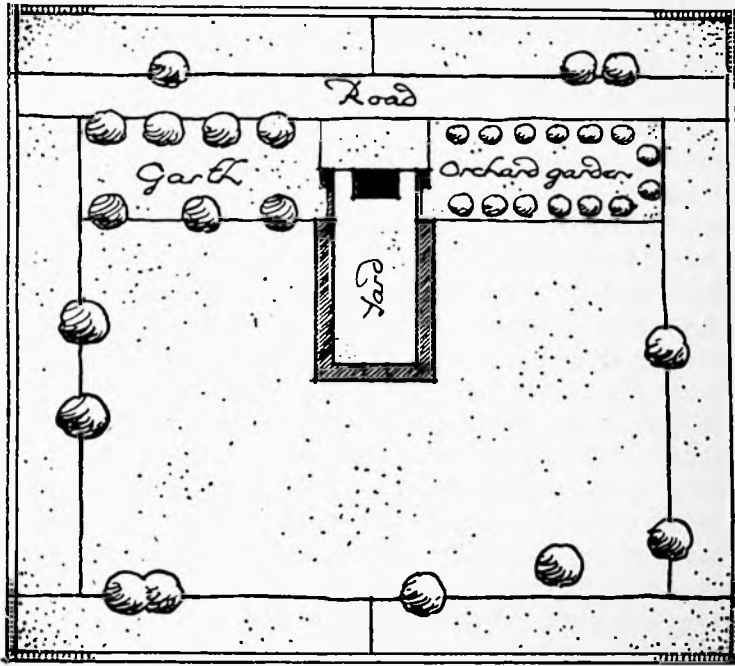


FIG. 13. Poultry-farm, as it might be, with the fowl-houses grouped about a 'yard', making the whole 'farm' one feature.

the hundreds of poultry-houses per square mile that 'scientific management' requires. A visit to a typical area like that about Southport and Preston on the Lancashire coast (which is still far from being fully developed) is necessary to experience the spiritual *dépression* that only such an area can give. There great areas of level landscape have been converted into a new kind of desert by poultry-farms of all sizes varying from the ones that maintain a few hundred head of poultry to those that maintain several hundred thousand or half a million as well as ten or twenty thousand pigs as a side-line. In the daytime one passes through what seems a gigantic unending garden-city for pigmies with one's whole horizon broken by hundreds of detached wooden houses of all sizes and in all conditions from perfect newness to ancient dilapidation. Farming has hitherto been regarded as essentially a rural occupation, but poultry-farming certainly is not; for immediately a

poultry-farm is established rurality gives place to a peculiarly debased form of pigmy urbanness. Even black night cannot shut it out: thousands of little windows light up at sunset and stay lighted till dawn. There is no escaping the knowledge that one is in the presence of 'scientific' poultry-farming.

Mr. H. G. Wells anticipated 'brightly neat poultry-farms'. If only they were! But it is a curious thing that in Denmark, the great egg-producing country with which our farmers are now competing, there is not a sign of all this scientific disorder. Denmark really is 'brightly neat'.

As the damage to the countryside by spasmodic and ribbon development could largely be avoided by the grouping of houses into villages, so the damage by these poultry-houses could be avoided if they could be grouped into large organized units. If they were grouped together as shown on Fig. 13 they would not only fall comfortably into the landscape with their long, low, horizontal emphasis, they would be far easier for the 'farmer' himself to manage; they would then be really 'scientific'. One of the present difficulties against such a grouping is the farmer's terrible fear of disease spreading rapidly among a concentrated flock, but the greatest difficulty is the absolute lack of control by any public body over such buildings: these are unregulated structures: they can be run up anywhere by anybody without let or hindrance.

While the damage of the poultry-farm is still fairly limited, that of the motor service-station extends to the remotest part of the country. Part of the disorder and dilapidation of these places arises out of the manner in which they developed. As motoring became common great numbers of premises, such as cycle shops and blacksmiths' forges that had served modes of locomotion that were being displaced, began to offer services of fuelling, the execution of minor repairs, &c., to the motorist as a side-line to their main business. The men who owned these places, small traders, mechanics and the rest, were persons of the scantiest capital and as they developed their premises they necessarily did so in the cheapest possible way, by converting old sheds or erecting new ones out of the cheapest materials—corrugated iron, boxes, and odd timber—decorating them with the crude enamel signs that the agents of the petrol, oil, and tyre companies forced upon them. So we got the modern garage filling-station, in all its stages of bleak dilapidation, incongruity, untidiness, and shocking barbarian ugliness, causing the most widespread disaster to village and countryside.

In this way the service-stations have acquired such an infamous reputation for philistinism that there are people who would banish

them altogether from the rural districts, and it is everywhere acknowledged that emphatic prohibition of the grossest indecencies, at least, is essential. During the last few years, however, there has in many parts of the country been a very considerable improvement in their appearance, and there seems no reason now why the service-station should not eventually become a fairly respectable member of the community of country buildings.

There is, nevertheless, a good deal to be said for its limitation to certain areas, and the limitation of its numbers in those areas. There are some places where even the most admirably designed station would be an impertinence and an intrusion; there are others where it would be a danger to the traffic it sets out to serve. And everywhere in the country a superabundance of stations is destructive of country-character. It has been suggested that filling-stations should be required to be licensed, as public-houses are; and there is much to be said for this; for, though strong controlling powers are already obtainable through two Acts of Parliament,¹ such a licensing would cover areas where the Acts are not in operation or are inadequately enforced. By whatever way it was secured, it would be a service to the countryside (as well as to petrol retailers whose livelihood is made precarious by much competition) if filling-stations were limited to, say, one to every four or five miles of road. To carry him over the interval between stations four miles apart the ordinary motorist would require only one-quarter or one-fifth of a gallon of petrol. If in these days of petrol gauges he passes a station with his reserve below that quantity, he can blame only himself when he gets stranded.

The principles which we have already discussed as governing buildings in the countryside apply to filling-stations and garages as much as to any other erection. It has frequently been advocated that a standard type of filling-station should be devised for establishment in all parts of the country. That suggestion shows as little regard for the diversified and various charm of rural England as do the present filling-stations themselves. It would mean the use of alien materials in many landscapes; the very thing we want to avoid. Even more stupid is the attempt which is sometimes made to make the stations romantic and picturesque or to disguise them as rustic arbours. There is no reason for a garage to be ashamed of its function. Disguise and applied picturesqueness result only in incongruity. What is wanted is straightforward simple designing in material that will harmonize with the particular landscape in which it is set.

There are some special considerations, however, with regard to the

¹ The Town Planning Act 1925, and the Petroleum (Consolidation) Act 1928.

equipment and advertising at these stations. These have already been carefully examined by the Parliamentary Committee which was appointed to advise as to the most suitable measures for carrying out the object which Parliament had in view in enacting the Petroleum (Consolidation) Act of 1928, and all that is necessary here is to summarize the findings contained in the admirable report of that Committee. Upon these findings the Committee based and drafted a model by-law to be used under the Act, and if this by-law were adopted and enforced by the empowered county and borough councils, it would go a very long way indeed towards achieving the desirable standard of decency.

The vilest things about the present stations are their advertisements. They are not only unsightly, they are useless even to the garage proprietors, for they get no profit from them. The obvious and easy way of dealing with the nuisance is to prohibit it altogether. It is clearly necessary, however, to permit the display of some notice that will indicate to approaching motorists the existence of the station, and to allow the name of the proprietor to be displayed on the premises. These things, it is suggested, may be achieved by the use of a standardized symbol which will perform for the station the function that a painted pole performs for a barber's shop; and by permitting the display of the name of the proprietor and of the premises 'not more than once in a position not higher than the lowest level of the roof in letters not exceeding twelve inches in depth'. Subject to these exceptions, and the small one mentioned below, all advertisement whatsoever, including flashing lights, should be prohibited.

Further strong criticism of existing stations arises from the glaring discords of colour on the pumps and oil containers. Some criticism has been aimed at the pumps themselves, but this arises from their association with the colour discords, for the pumps (though certainly the 'column' type is far preferable to the 'bulbous') are generally seemly enough. The only way of avoiding this discord is to insist on a uniform colour throughout each station. Here again standardization has been suggested, with 'green for the country and white or cream for other areas' as the standard colours. But here again standardization over the whole country is undesirable, though it may be desirable in each of many distinct areas. The insistence on uniformity within each station is undoubtedly the best method for ordinary areas, and everywhere it will be necessary in trade interests to permit a band of distinctive colour, indicating the brand of petrol or oil supplied, on each pump or container, to a depth of nine and six inches respectively.

Though perhaps it is of more concern to the interests of road traffic

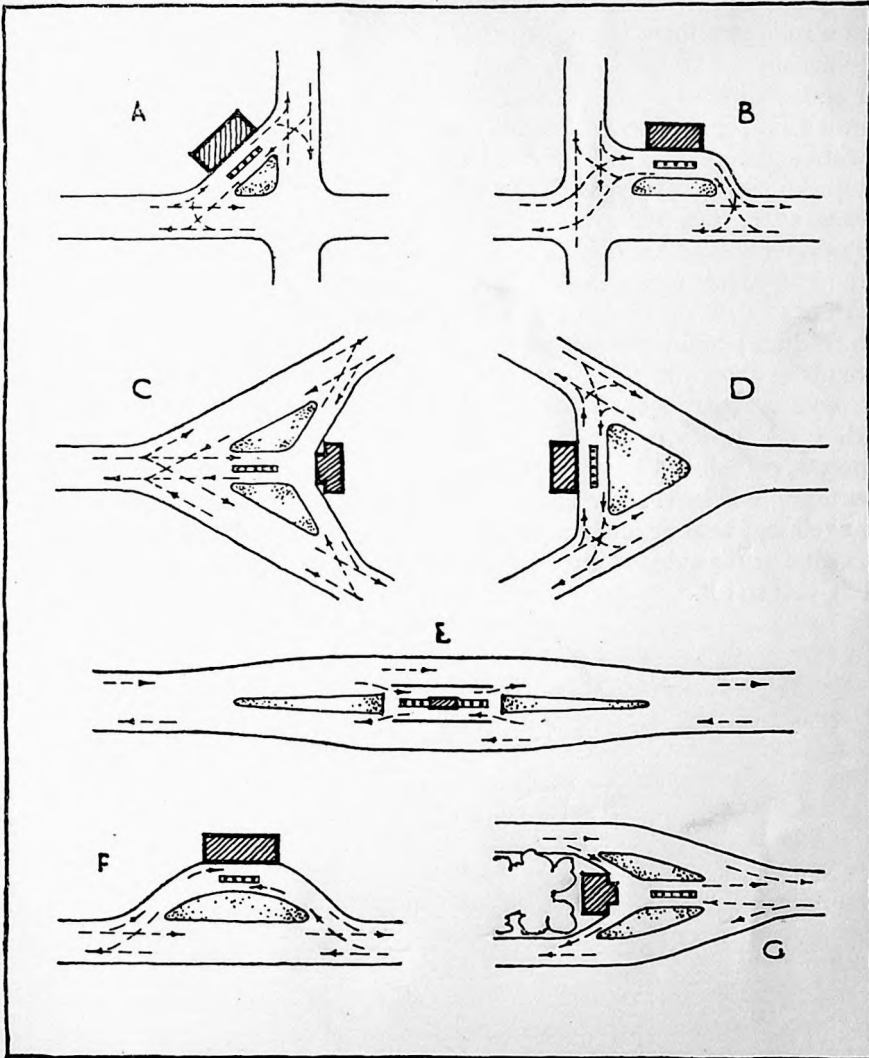
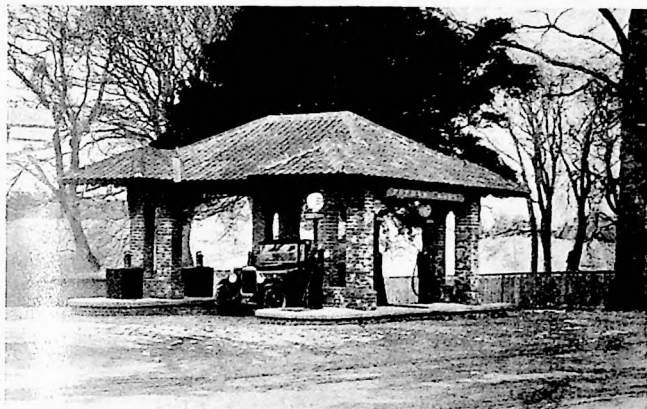


FIG. 14. Positions of petrol stations.

than to amenity, a word is necessary on the layout and position of these stations. It is obviously desirable that the pumps should not be erected on the roadside but on an island on premises off the road, so that vehicles may pass in each direction, and, standing to receive attention, will not interfere with other traffic on the road. Probably the ideal site

for a station, from the point of view of traffic, would be in the centre of a road as shown in Fig. 14 E, the road widening out on either side to accommodate one-way traffic. The next ideal site is that shown in Fig. G, where a station is established at the point where a road splits into two separate carriageways, as it may sometimes do when it is widened, to save a belt of old trees. In both these cases there is no interference whatever with any other traffic on the road. In all other cases there must be, to some degree or other. Quite the worst site is at a cross roads, as is shown in Figs. A and B. Here the traffic to and from the garage adds considerably to the number of collision points which already exists, and if the crossing is a busy one the garage is likely to introduce a highly dangerous state of confusion. A site at a junction of roads as shown in Figs. C and D is also dangerous. A position away from cross roads is the most nearly ideal, after the positions in E and G. Here, as shown in Fig. F, the station introduces only two collision points, occasioned by traffic belonging to the opposite side of the road entering and leaving it. Even the danger from these two points could be reduced to practically nothing if garages were deliberately arranged on alternative sides of the road: this one on the right, the next on the left, and so on.



17. FILLING-STATION IN HAMPSHIRE *C. P. R. E.*



18. FILLING-STATION AT DORCHESTER



Photopress Ltd.

19. A COUNTRY ROAD

CHAPTER IV

COUNTRY ROADS

I. THE *ENGLISH* ROAD

'THERE are primal things that move us. . . . Of these primal things the least obvious and the most important is the Road. . . . It is the humblest and the most subtle, the greatest and the most original of the spells which we inherit from the earliest pioneers of our race. It was the most imperative and the first of our necessities. It is older than building and than wells.'¹

That is the universal appeal of the road. But the English road has a special appeal over and above the appeal of antiquity: as much as the English countryside of which it is so definite and characteristic a part, it has an individual character that is peculiarly distinct from the universal. It has a charm and a beauty that has no likeness anywhere. A road in France might be a road in Denmark: the spindly timber that occasionally borders it, the unenclosed boundaries which give views over the open unenclosed country, the long straight stretches, the general raggedness, the artificiality—all these stamp it as the universal road. The English country road is something apart and unique. It belongs to the countryside: its hedges anchor it to the fields that surround it. It is national. It is lovely. To walk along it between April and June is to witness a very special miracle of spring wrought only for the inhabitants of England. Nowhere is there so tender, so lovely a green as in those quick-set hedges, those various bordering trees, that flower-decked hedgeback, that wayside strip of grass waste. In all seasons the loveliness persists. 'Her ways are ways of pleasantness and all her paths are peace.'

Apart from the beauty of the natural things that border the roads, much of their delight springs, as it does everywhere in the countryside, from the sense of enclosure, with its comfort and friendliness and its reduction of the vast natural scale. That delight is given by the dry stone walls of the hill country as well as the normal green hedges of the lowlands. Delight, surprise, and a wide diversity of interest, are afforded also by the lack of uniformity in gauge and cross-section, and by the curves and changes of direction which continually open up fresh vistas that reveal, hide, and reveal again new objects, new scenes and new landscapes.

These are the things which make the English road individual; that so sharply differentiate it from the road systems of the rest of the world

¹ H. Belloc, *The Old Road*.

and make it so worthy a place to view the special beauties of the English countryside.

But, more than any other feature in the landscape, the road has recently undergone and must continue to undergo a revolutionary change. Its surface was once, not long since, quiet and but infrequently disturbed by the passage of some leisurely traffic. Now it must be altered and made fit for continuous streams of swiftly moving vehicles. Never again will all its paths be peace. Yet still its ways may be pleasantness, and still it may retain its traditional individuality and be saved from absorption into the universal.

We will examine this possibility.

2. TRAFFIC AND AMENITY

There is a loosely-held though widely-spread opinion, especially among motorists, that the whole of the highway system of the country is out of date, inadequate, and in general need of such amplification as would mean practically a new system. This is a completely mistaken idea with no foundation in fact. On the contrary, it is safe to say that the network of national and local roads which we have inherited from the pre-railway period presents a remarkably intricate and efficient system of communication. The Royal Commission on Transport, in its final Report of 1930, gave this as one of its principal findings:

‘There is much talk of the congested state of our highways, but in referring to road congestion it is necessary to exercise considerable caution. The traffic censuses published by the Ministry of Transport are peculiarly illuminating in this connexion. An examination of them shows conclusively that our highway system as a whole is not congested and that for the most part it affords adequate facilities for traffic. . . . Congestion exists practically only in towns and other urban areas.’

A motorist is apt to complain of the ‘overcrowded’ condition of a road if he finds he has not continually got a whole mile-long stretch of it to himself, but is one of a widely spaced and even rapidly moving queue of half a dozen or so. He will declare that there is no pleasure in motoring under such conditions. He will search his map for some alternative route by quiet lanes where he can speed along with the road to himself. And when others find that alternative route and all further alternatives are exhausted, he proceeds to demand a new road system so that his motoring may again become a pleasure.

But motor-cars are a means of locomotion, and roads are a means of communication. They are both primarily utilitarian. We must bring ourselves to a full acknowledgement of this. We may regret

the loss of the leisureliness that the roads once had; but that loss is inevitable. There is no help for it. Even if we opened up a multitude of new roads, still we would not get the ancient quietness and calm back again. We should only invade still further the sweet peace of the countryside: a double loss. We must now acknowledge that the measure of the road's success is its ability to provide for travel with reasonable speed, safety, and comfort. Pleasantness may perhaps be retained: everything that can be done to retain it must be done. But safe, swift movement must be the first consideration. We must make the principal roads suitable for hurrying traffic; we may even have to limit certain types of traffic to them, such as charabanc and lorry traffic—and, perhaps, by so doing, by concentrating noise and speed where it already is, we may still retain some peace and pleasure on the by-roads.

With the exception of a very few roads on the outskirts of the cities and the larger towns, there is hardly a single road in the rural parts of the British Isles that is even within measurable distance of being overcrowded in its functional sense. This is evident to any careful observer. It is still more obvious on a scientific reckoning. It has been found by observations and calculations made in America that '1,880 vehicles per hour is the maximum that may be safely accommodated *on a single lane* (i.e. per unit width of 10 feet) of uninterrupted traffic on an unobstructed roadway, and that this could be obtained with vehicles moving at a speed of 15 miles per hour'.¹ Now rural roads usually provide that condition of 'uninterrupted traffic on an uninterrupted roadway' (that is, there are no difficulties to contend with from parked vehicles or from frequently occurring road junctions), and making, therefore, so generous a reduction of this traffic-figure as to one-half, we have the maximum safe accommodation of a rural road fixed at 900 vehicles per hour per 10 feet of carriage-way width. Let us say 750. Compare this with the extremest of existing conditions. Probably the most heavily-laden road in this country, certainly one of the three most heavily-laden roads, is that from East Lancashire to Blackpool via Preston. During the height of the busiest season this road carries 9,000 vehicles per *day* of 18 hours. With its carriage-way of 40 feet it can carry at least 4 times 750, or 3,000, vehicles per *hour*, or 54,000 vehicles per 18-hour day. If its traffic were spread evenly over the whole 18 hours (which of course it is not) it could carry six times as much traffic as it at present carries. Actually, during its busiest *hour* of the busiest week during 1928 when it carried an average of 9,000 vehicles per day, it carried about 1,750 vehicles, or rather more

¹ *Regional Plan of New York*, vol. iii. See also pp. 181 and 182.

than one-half of its maximum capacity. This road may be regarded as crowded, though that only for a certain comparatively brief season, and motoring over it is certainly not much of a pleasure. But it will be seen that even this extreme example is still far from a true state of functional congestion. As for the rest of the main rural arteries, very few of them carry more than 2,000 vehicles per day, and very many of them less than 1,000, so that they carry far less per *day* than their capacity per *hour*. The second-class roads are in a still easier position; and of many of them, and of practically all non-main roads, it is safe to say that they have a capacity at least fifty times as great as their traffic. Demands for 'a new road system' are grotesquely absurd in face of such facts.

Of course there are instances where some new link in the existing system is an obvious necessity. These links will have to be provided. And, most of all, there is much that needs doing to improve the widths and alinements, particularly the alinements, of many of the existing parts of the system. All this work will gradually be carried out: indeed much of it has already been done. Naturally, the improvements may never seem to reach full completion, for no road system can achieve finality while changing factors continue to produce new conditions. But always new works should be undertaken with caution, and loose talk of congestion should not be allowed, as it so often seems nowadays to do, to rush the community into unnecessary and damaging 'improvement' schemes.

Perhaps the one thing that requires more immediate attention than any other in the present road system is a complete scheme for the by-passing of the numerous small towns and villages whose narrow streets are congested and made noisy and unpleasant by the passage of through-traffic that has no business there. The objections that were always voiced a few years ago by the small tradesmen of a small town which was to be by-passed are heard no more. Townsmen and villagers are now glad to be rid of the very mixed blessing of through-traffic. The motorist, too, even though he be out for beauty and pleasure, will easily succumb to the seductions of a subtly-devised by-pass. Let the by-pass be made then, and as subtly-devised as may be. Obviously it should be made as convenient as the old road it replaces. It is of little use making a semicircle round a place, taking off from the old road at right-angles at either end. The sense of direction must be preserved: the take-off from the old road must be smooth and easy: the traffic should be beguiled, not bullied. And when the by-pass is made, it should remain a by-pass, not become a new street that may be cluttered up with bungalows, garages, and

cafés. Buildings along it should be prohibited; it should be screened from the old village, but by plantations and woodlands, not by ribbon development. Unless this is done we may one day be faced with the necessity of by-passing the by-passes.

These things being necessary, then, a set of principles should be determined for their carrying out.

The first question is as to width. Every road must afford at least space for two vehicles to pass each other when travelling either in the same or in opposite directions. The governing factor is therefore the unit width to be allowed per vehicle, or stream of vehicles. It is customary to fix this unit as 10 feet, which would imply that every carriage-way should be at least 20 feet wide. Now there are thousands of miles of country roads which are less than 20 feet between hedges, let alone with a carriage-way of 20 feet, and these, if they do not carry a great bulk of traffic, are perfectly satisfactory for travelling along. The average car is not much more than 4 feet broad and even the giant motor coaches are not more than 8 feet. What, then, has been taken into account over and above vehicle width in fixing the 10-foot unit? Just this: the space required for passage safely at great speeds. Two vehicles can pass one another safely in 20 feet if they are travelling at 60 miles an hour; in 15 feet they cannot. That is excellent for main roads; but, despite the suggestion that roads are primarily a means of communication, is it reasonable to expect every by-lane in the country to be designed so that a motorist may pass at such a speed the one opposing vehicle that he may meet in the space of an hour? It surely is not. It is no hardship that he should occasionally slacken his speed below 60, even to 20, miles per hour, on a road that is infrequently used. On country roads, then, that are not main or second-class roads, that have say less than 1,000 vehicles per day, this minimum width of 20 feet of carriage-way is often quite unnecessary. Generally a width of 15 feet may be regarded as a minimum, but even this cannot be regarded as absolute. There are miles and miles of country lanes at present no more than 10 feet wide in carriage-way: they have only a dozen or so vehicles a day passing over them, and they are perfectly safe and satisfactory at that width—and delightfully pleasant. They should remain untouched; and the heavy traffic that might make them dangerous should be forbidden them.

When, however, a country road has attained such a traffic importance that there is frequent passing of vehicles, and where the necessity for frequent slackening to low speeds would involve annoyance and danger, the recognized unit should be imposed, and a minimum carriage-way of 20 feet provided. But even for the main traffic roads

this minimum is *generally* the maximum required. It probably is so for something like 80 per cent. or more. It actually would accommodate some 1,500 vehicles per hour, or some 27,000 per 18-hour day. But, of course, it would be unsatisfactory long before it reached that condition, for a shortcoming lies in the fact that, because there are only two traffic-unit widths, an overtaking vehicle must occupy for a few moments the lane of the oncoming traffic. The adequacy or inadequacy of a 20-foot wide carriage-way lies, therefore, not in whether it carries 1,500 vehicles per hour, but in whether its traffic is so great that overtaking becomes impossible or dangerous. Actually the danger point, and carriage-way's inadequacy, is probably reached when it carries about 2,500 vehicles per day.

When that point is reached a greater width will be necessary, and another unit will be required to provide a common centre lane, or corridor, for overtaking traffic in both directions. That means a width of 30 feet of carriage-way. For all but a very few particularly heavily-laden rural roads (perhaps a dozen over the whole country, roads carrying some 7,000 vehicles or more per day) this width is ample for both safety and speed; and for those very exceptional few a total width of 40 feet of carriage-way, providing for two lanes, a normal one and an overtaking one, in each direction, may be necessary. This width of 40 feet, however, may be regarded as the absolute maximum both for present and most conceivable future needs—we have seen that it will accommodate 54,000 vehicles per 18-hour day. It will hardly ever be required on our country roads. The general maximum width required will be 20 feet.

That decides the width of the carriage-way. The total width between fences is determined by that and such additional things as footpaths, riding and cycling tracks, and such provision for 'amenity' as may be necessary.

The old country lanes rarely had footpaths. The fenced roadway served both vehicles and pedestrians satisfactorily. But under present conditions, let alone under the possible conditions of '750 vehicles per lane per hour', a footpath is a necessity. The pedestrian may get little more pleasure using the footpath than the motorist using the carriage-way. The pleasure will have to be obtained elsewhere, by a means which will be described later. Like the carriage-way, the roadside footpath will be provided primarily for communication; and for this purpose it will be required on one side of the road only, and a width of 5 feet will generally be sufficient for it.

The provision of riding or cycling tracks is a rather special matter. The necessity of a riding track, in particular, will depend purely on

local circumstances; but it should certainly be provided where there is a real local demand for it. It merely means the acquisition of an extra strip of land which will entail no special construction or maintenance. The cycling track, however, is applicable to all parts of the country. It is, moreover, the subject of some controversy. There are some who maintain that, so far from achieving the safety of cyclists and motorists which is its intention, it introduces additional dangers. It would undoubtedly lead to some danger and confusion upon its first introduction, though its success on the Continent—particularly in Holland where it is a common feature—should be borne in mind. It would be necessary to provide a separate track, say about 8 feet wide, for traffic in each direction. The tracks, therefore, would need to be situated on both sides of the carriage-way, separated from it and from the footpath or riding track by a grass strip. Unlike the riding tracks they would need to be specially constructed and kept in good repair.

All these special subdivisions would make a very complicated road-way, and a road is most efficient when it is simplest. These cycling tracks are as yet far from indispensable. Perhaps they may become necessary as motor traffic develops—though as that happens it is more likely that cycling will decrease—but their construction, and even provision for them, should be delayed till then. We can, therefore, regard the essential traffic widths of the main country roads as being, for the vast majority, 25 feet of fenced area consisting of 20 feet of carriage-way and 5 feet of footway; for a limited number of main arteries 35 feet; and for a very few special arteries 45 feet. Any extra width above this will usually be provided for 'amenity'.

As we shall eventually see, a town street may very often suffer in its dignity and aesthetic effect from a width which is too great in relation to the height of its flanking buildings. On a country road there is no question of conflicting scales to be considered: there are no important verticals to whose scale the horizontality of the road is to be related. But, nevertheless, too great an openness there may destroy beauty and character. We have seen that the English road, like the whole countryside, gets a great deal of its charm and friendliness from the taming of distance and from the sense of enclosure which it has. This, if it is not sufficiently realized at home, is recognized by all foreign visitors, for whom the English lane holds a very special charm. Karel Čapek speaks of it in his *Letters from England*. 'I have wandered along roads lined with quickset hedges,' he exclaims; 'sheer quickset hedges which make England the real England, for they enclose but do not oppress.' These hedges suggest their enclosure

because the space between them is comparatively small. Increase that space considerably and their effect is lost. The narrow English lane is warm and friendly: the wide arterial road is bleak and hostile. More than anything else it is the absence of the sense of enclosure which gives rise to such criticisms of the modern road as that of Mr. H. J. Massingham, who says that 'the motor road, inhuman, unnatural, and altogether relentless, drives like a ram through the countryside with as much regard for its forms and design as a hot poker drawn over a carpet'.

The question of providing any additional width above the width of traffic requirements is therefore one which needs very careful consideration. There is a tendency among road engineers to provide extra width for 'amenity'. More often than not it destroys it. If it is a question of preserving and including within the road's boundaries some existing trees or other special landscape feature, well and good. If it is merely a case of providing a grass verge or some other loosely-recognized 'amenity-feature', the engineer should follow his own frequently tendered advice to motorists and 'proceed with extreme caution'.

The sense of enclosure must be preserved, and by the traditional materials, by the hedgerow in the lowland country and the dry-stone wall in the hill country. Upon this depends not only the character of the road itself, but much of the character of its neighbouring countryside. The attempted replacement of the hedgerows in the new and widened roads by concrete posts and a few strands of wire is crass stupidity. It should be a legal obligation upon a highway authority that where any hedge or dry-stone wall is displaced in a road widening scheme, a new hedge or wall of similar material should be provided in its stead: often, indeed, it could be provided some years before the widening was carried out so that it might have attained some maturity before it was called upon to fill its important function. As a matter of fact, it is, as often as not, both possible and desirable in the interests of traffic itself to preserve an old bordering hedge, and the trees that stand in it, by widening the carriage-way within the limits of the existing road and placing the footpath on the other side of the hedge, perhaps planting a new hedge beyond that. Gaps may be made in the old hedge every now and then to provide access to the carriage-way from the footpath. Behind their hawthorn screen pedestrians may then regard even '750 vehicles per lane per hour' with some degree of equanimity.

One of the dangers that beset the future of the country road is standardization. The engineer likes to see his road running on mile



K. Reitz & Son, Wembley

20. BEFORE WIDENING: 1928



K. Reitz & Son, Wembley

21. THE SAME ROAD AFTER WIDENING: 1931



22. BAD PLANTING



23. TREES SAVED IN A ROAD WIDENING

after mile to the same width and cross-section: he sees no difference between the town street and the country lane. But how great a variety might be achieved if the road was made with imagination as well as

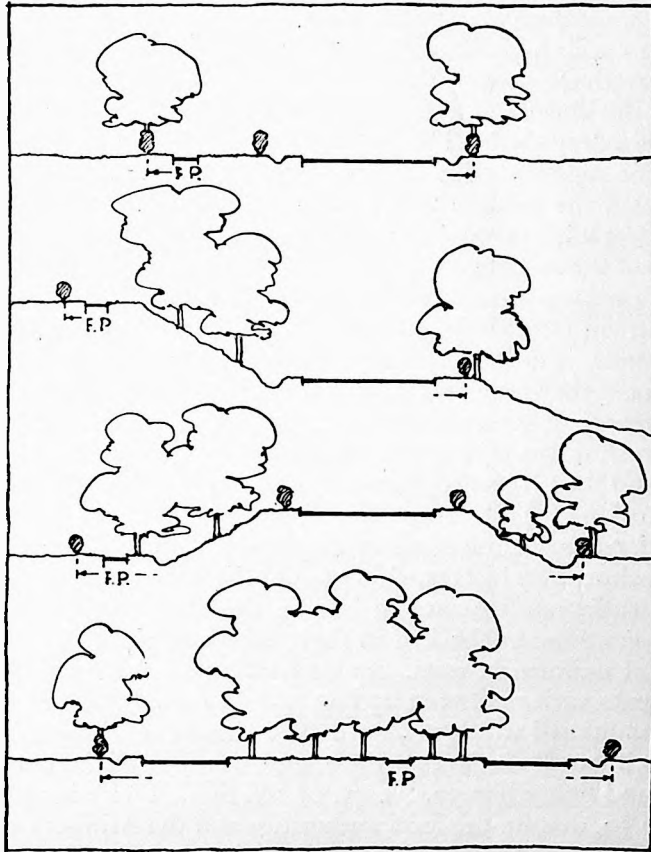


FIG. 15. Country roads: possible variety of cross-section.

tarmacadam and asphalt! What varied combinations are possible with the materials and effects that lie at hand for the road-maker to use if he will: the existing hedges, woods, groups of trees, solitary trees by the roadside, streams, ditches, ponds, grass wastes, cuttings, embankments, and all the undulating, infinitely various character of the surface to which he applies his asphalt ribbon! But the imagination of the road-maker seems tethered to a T-square and starved on a diet of formulae. How incredibly doctrinaire he can be! Within a few

miles of a great northern city, in a countryside that is bare, hedgeless, and devoid of trees, a main road with only a middling amount of traffic upon it runs for nearly a mile through the one wood within a 10-mile radius. The road would be delightful anywhere, but in that district it is spectacular, a thing of very notable beauty. The branches of the trees arch high above it, and, though the woods on either side are comparatively narrow, their oaks, beeches, elms, and sweet chestnuts give the illusion of a great green distance. On either side of the roadway is a deep ditch. The carriage-way itself does not carry a tenth of its traffic capacity. But the local rural council and their engineer had accepted the modern theory of wide roads. They would have a road 100 feet wide through the woods: they admired the wide suburban roads of the neighbouring city: a road, then, they would have with duplicate carriage-ways, a grass plot down the centre, an avenue of little suburban trees down either side and two footpaths paved with artificial stone. Fill in the ditches, fell the trees that are in the way, straighten out the curve that gives the road a double charm, smash the delicate tracery of green arching, let the daylight in—and the winds that will rush down this 100-foot gulley and shatter the whole trivial wood!—And they regarded themselves as progressive and enlightened persons working for the common welfare!

The old, normal, rural roads of England show no uniformity except in their enclosure by hedges. Nor should the new ones. The countryside will suffer an irreparable loss if the road engineers and the motorists continue unchecked in their flabby glorification of uniform widths and uniform layouts. As we have seen, the width for traffic requirements varies between 25 feet and 45 feet. There is no reason why the additional width to be provided should continue to be determined, as it usually is, so that the complete width of the road may be a nice round figure like 50, 60, 75, or 100 feet. There is no virtue in the figure 50, despite the local authorities and the Ministry of Transport: $37\frac{3}{4}$ is as good in one place and $53\frac{1}{2}$ in another. Variety is good in the so various countryside. Let the grass waste advance and recede as local circumstances and opportunities allow. The footpath may sometimes be close to, sometimes away from the carriage-way: sometimes on the top of a cutting, sometimes at the foot of an embankment. A dozen different things can happen over a mile of road. Away with standardization, then!—though with affectation too, the opposite error.

As with width, so with alinement. With roads, the straight line is the *greatest* distance between two points. Even the interest of the motorist flags as he travels along it. Interest, charm, beauty, variety, surprise: they all belong to the *curving* English road. And now safety,

and the motorists' comfort also belong to it; for the danger from dazzling headlights at night is reduced by curves and is heightened by long straights. In the town the straight road is the most natural, but in the country, and especially in the undulating English country, it is the most artificial thing. There it is Mr. Massingham's poker on a carpet. The country road should take regard for the forms and design of the countryside: its curves should be neither affectation nor wilful-

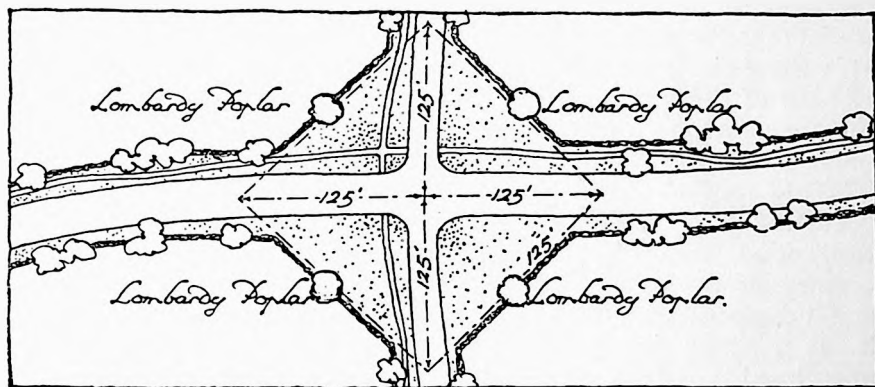


FIG. 16. Country cross-roads: visibility for traffic.

ness: they should result from an obvious desire to skirt that wood instead of crashing through it, from the desirability of taking advantage of that piece of rising ground, of crossing that stream at the best bridging point, of deviating a little to gather up the advantages and interest of that pond or this other special feature or landmark. Of course, modern traffic requires sweeping or gentle curves that preserve the sense of direction, not staggering corners or directionless windings. These indeed must be eliminated. But curves are both desirable and natural: they must be preserved in the old roads and perpetuated in the new.

A word is necessary on the matter of road junctions. Innumerable blind crossings and junctions at present handicap the road-system. They should be improved. The chief thing necessary to secure the safety of traffic is a wide range of vision at corners, and the minimum desirable range of vision has now been agreed to be that determined by a line drawn from the extremities of the centre-lines of crossing roads at 125 feet from the centre of the crossing. This is arrived at by taking 81 feet as the space within which a car can pull up when travelling at a speed of 30 miles per hour and by adding 44 feet as the distance over which the car would travel during a safety allowance of

one second. In the country the area enclosed by this line of vision may either be thrown into the roadway, with the hedge set back just behind the line of vision, or it may be retained in the flanking field, and the hedges within the line of vision either kept very low or replaced by an open fence.

Then there is a point of detail in construction which should be considered because of its effect on appearance. A kerb to border the carriage-way, or not? There are some points in favour of it. It is useful to traffic in that it gives a guide to direction at night or in a fog. It is useful also in providing a border and a contrast. The old winding ribbons of silver or yellow were in pleasing contrast, yet in subtle harmony with the varying greens and browns of the landscape: the modern dark neutral-tinted ribbon is neither in contrast nor in tone. The old rough-textured natural surface would fade away into the bordering grass: the modern smooth mechanical surface does not easily do so. Yet on the hedge-bordered enclosed roads of the ordinary countryside the kerb introduces a note of artificiality, of towniness; and it competes with the hedge as a border, or is made redundant by it. It is better that it should not be used there. Perhaps on the unenclosed moorland roads where it competes with no hedge and where it is particularly useful to motorists, it may be used with advantage. But it needs careful handling: its curves must be perfect, smooth, and flowing: if they are built up, as they so often are, of staccato, yard-long straights, they will be restless and unpleasant to the eye.

3. TREE-PLANTING AND PARKWAYS

The appearance of almost any road in a lowland country may be improved by trees. Like hedges, they fix the road in the landscape, soften its modern mechanical relentlessness.

They are wonderful emollients. But they can be misused. They can mar a landscape as well as make one, though their misuse would have to be gross indeed to mar it utterly. The danger is that they may be used so unimaginatively and uniformly that they will neutralize rather than heighten the character of the roads to which they are applied.

It is unfortunate, for instance, that the planting on roads should nowadays be almost invariably conceived in terms of the avenue. A few years ago the general criticism of road improvements was that trees that were destroyed by them were not replaced, and new trees were never or rarely planted. The criticism now is that there are too many, or if not too many as a whole, at least too many spread out too far. Every new road is an avenue. Now the avenue, though it is an

urbanized feature borrowed from the formal French parks, has often been used with beautiful effect in the countryside. And it may often again be so used. But its effect on the landscape lies in its contrast. An occasional avenue provides dramatic interest, especially when it is used in its proper architectural setting, as in the approach to a mansion or a village. But miles and miles of unrelieved avenues are wearisome and monotonous—and incongruous, too. Yet, in the fear of being

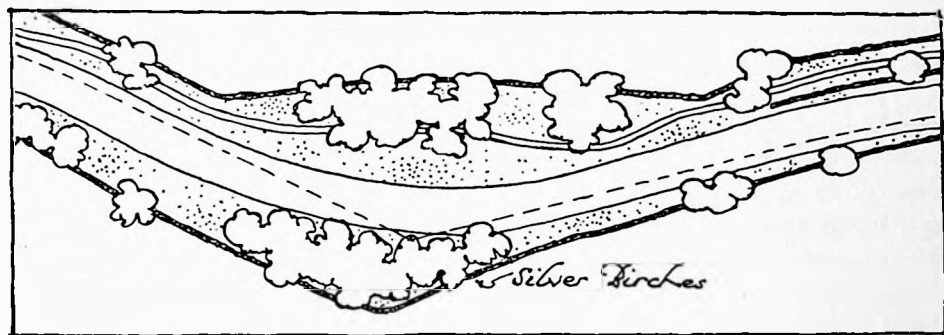


FIG. 17. Curving road: silver birches on the outside of a curve so that head-lights at night may impinge on the white trunks.

accused of inattention to amenities, the road authorities are now applying avenue-planting far and wide on new and widened rural roads. It is no uncommon thing to have an avenue 20, 30, or more miles long. Soon there will be nothing but avenues. This may seem to be an exaggeration; but it is not. The full effect of the recent tendency towards avenues will not be felt for another twenty or thirty years when the trees have come to some maturity. Then the effect will be very great, and very uncomfortable. Continued for a few more years, the effect on the individual character of the countryside will be ruinous. It is certainly time to call for a halt in present methods of planting.

The scheme of roadside planting in the country should be as irregular and naturalistic as possible. It should take cognizance of and reflect the character of the landscape through which it is passing and should rarely, if ever, attempt to impose a new character upon it. It should be undertaken in the true spirit of that best English landscape style which has produced so many beautiful country parks. It should be so designed that the road should seem to pass through a pre-existing scene rather than that the scene should seem to depend on the existence of the road. This effect may be attained by the planting of clumps, smaller groups or solitary hedgerow trees in places that

are carefully, though not obviously, selected to emphasize and subtly attract attention to views or natural features. A great deal will depend, of course, on the roadside space available, and this is where the irregularity of the boundaries which has already been mentioned as desirable, will prove to be advantageous. But where the space is limited it may often be possible to undertake some planting on the adjoining land; and it should not be forgotten that most of the trees on the old roads (and in the fields also) are planted in the hedges themselves where they cause least interference and danger and are themselves most protected against damage.

Though this is not the place to attempt the general question of roadside planting in detail,¹ it is necessary to refer briefly to one or two further points. There are districts where little or no roadside tree-planting is desirable, either because of the special detail of the surrounding landscape or its extreme openness, as in upland country, or because of the peculiar situation of a road, as, for instance, a road on a sky-line. Similarly, there are places where it may be dangerous; as at cross-roads or road junctions, or on the inside of curves, where the trees would block visibility. And there are trees that should not be planted, or planted only with discretion; trees that drop a heavy leafage and cause skidding; and trees that harbour pests which infect or injure agriculture in their neighbourhood. Then there are trees which, it has been suggested, might be systematically planted and used almost as part of the highway code: Lombardy poplars near cross-roads, to give warning (which would fortunately almost prohibit the use of poplars elsewhere); silver birches on the outside of a curve where headlights at night would impinge on the white stems to the assistance of the motorist. These points and many others show that roadside planting is not merely something which may be undertaken lightly to give cover to a multitude of aesthetic crimes, but is a work which has its own special difficulties and dangers, its own possibilities of misuse, and one that can only be successful when exercised with imagination and discretion.

Roadside planting is afforded its greatest scope in the parkway. In England, the parkway idea of a wide tree-planted combination of road and open space—founded largely on the French boulevards—has hitherto been applied only, and without much success, to the town. It is probably much more applicable to the country. In America it has been so applied, with magnificent success.

¹ For some discussion of general principles, and an exhaustive analytical list of trees, see *Roadside Planting*, published for the Roads Beautifying Association, by Country Life, Ltd.

In its original intention in England the parkway was meant to be a green girdle linking up scattered open spaces into a complete connected system. That purpose it can delightfully serve in the country towards the national parks, regional reserves, and local open spaces which will be described in the next chapter. But even though it connects no scattered, large, open spaces, it can still, *occasionally*, be invaluable in itself, a comparatively narrow wedge of public open space running its 5-mile, 10-mile, 20-mile course through the countryside. It requires merely an extension of those principles which we have already applied to the ordinary country road, though it should only be created with the utmost care. It should only be attempted where there exists sufficient material, tall trees, bushes, and so on, to make it immediately successful, to give it scale. It should *never* be a glorification of width for width's sake. It should absorb into itself parts of the original country it passes through. If it is a new road it may now and then take in the odd remnants of a small field or a wood that it has cut in two, it may extend its boundaries to include a brook, a pond, or a quarry, or to gather in a group of trees or secure the skyline. It can do all these things with but little extra expense. And if it is a widening of an existing road it can do similarly pleasant things. Where the new carriage-way has left the old to take an easier bend, the spare space can be retained and put to some pleasant use—how often now is it railed in and left dead and useless, that the undesirable uniformity of the road may be kept intact!

Thus can the country parkway and the country road be kept in character with the traditional English lane and the traditional English landscape, and made not only means of communication but objects of beauty and ways of pleasantness.

CHAPTER V

COUNTRY RESERVES

I. URBAN POPULATIONS AND THE COUNTRYSIDE

THE countryside is bound to be made more and more accessible for the enjoyment of urban populations. Hitherto it has been seen chiefly from the roads and the railways: looked at merely, like a garden in which one may not walk. The urban populations require more than that now. They want their own stake in it. They want to walk over its field-paths, over its springy turf, through its woods, alongside its streams: to feel it and know it intimately, rather than only to see it over hedges. There is a genuine deep love of the open air and the open spaces in all sections of the people to-day. It is manifested in the enthusiasm for 'hiking' (surely far more than a passing craze) and in the inspiring Youth Hostels movement, as well as in the motoring habit and in bungalow and ribbon development: in ways that inflict serious damage as well as in ways that do none.

At present the opportunities for townspeople's enjoyment of the countryside, though they are fairly extensive, are unsatisfactory. The motor roads are noisy and unpleasant for pedestrians, and their alternatives, the public field-paths, of which there is a vast number, are unrelated, ill-defined, and insecure. There is a great aggregate of common land, but it is most irregularly scattered about the country, often in places remote from centres of population. There are huge areas of moorland and mountain over which, though they are held as private property, the public is allowed to roam freely during most parts of the year; but these again are often far from towns, and the public rights over them, if there are any, are insecure. There are also many private parks and demesnes to which the public is occasionally granted the privilege of entry—under rather chilly conditions of patronage or on a contribution to charity.

There is no system whatever about all this. A town's access to the countryside seems to depend almost solely upon the accident of its situation against a moor or a common or close to a private demesne. It should no longer depend upon such accidents. Hitherto it has been thought satisfactory if a town imitated the countryside in its local park and provided a generous area of recreation grounds. Now it is its duty to acquire natural not imitative country for its inhabitants' enjoyment.

Upon this improved accessibility of the country much urban and rural good depends. The worst of modern expression in both town



The Times

24. A COMMON



25. BEAR MOUNTAIN PARK

Commissioners of the Palisades Interstate Park

and countryside arises from country-worship (often blind and ignorant, but nevertheless actual). The stringing ribbons of bungalows and all the gradual urbanization of the countryside, the spreading semi-detached cottage-iness, the 'landscaped' parks and the rapid rustication of all the features of the town arise from this condition. If, therefore, we are to preserve the countryside from the town and the town from the countryside, this country-worship and this love of the open places must be taken account of, and a full measure of the possible enjoyment of the countryside must be assured to all. Thus a great deal can be done towards saving the countryside by opening up some of its features for urban enjoyment.

2. NATIONAL, REGIONAL, AND LOCAL RESERVES

Country Reserves should fall into three categories. There should be National Reserves, large enough to serve as holiday centres for people from all parts of the country: there should be Regional Reserves which would serve a whole region or a group of towns for say a week-end's rambling and recreation; and there should be Local Reserves, a wood, a viewpoint, a part of a river valley, and so on, which would be a town's own individual stake in its immediately surrounding countryside. All these types should be connected together systematically by footpaths, bridle ways, and those country parkways that we have just mentioned.

National reserves should be on as heroic a scale as possible. They obviously cannot in Great Britain be on anything like so heroic a scale as those great American and Canadian examples, the Yellowstone and Jasper Parks, each covering an area of many thousands of square miles, which have given so vivid a meaning to the term National Park. The purpose of those is different and the circumstances under which they are established are different. Those great areas are primeval lands—virgin forest, gigantic mountain, deep ravine—areas which have never been cultivated or brought under the influence of man. The central idea of classifying them as national parks is to keep them for ever as they are, vast tracts of untrammelled nature preserved for the enjoyment and education of the people. Moreover, it was easy to establish them so. Being but the most primitive parts of a vast primitive area they had not acquired any great economic value nor had they hitherto been brought to any human service.

Nothing on that scale is possible here. There are no vast primeval lands in Great Britain, and even the wildest areas have acquired some economic value and some human usefulness from which it is difficult and generally undesirable to withdraw them. This island is small and densely populated. But it is because it is densely populated that its

land is highly developed and valuable; and it is because its land is highly developed that its dense population has but little access to it.

If the more famous American examples of national parks afford us nothing that we can imitate here, some of the State parks do, as regards size at least. In New York State there are two such 'parks' owned by the community. The larger one, the Adirondacks reserve, occupies a mountain-forest-and-lake district, some 60 miles square, and is within 160 miles or so of New York City and a similar distance of Boston. The other, the Catskill park, occupies an area of nearly 600,000 acres and is within some 80 miles of New York. Some areas approximating these sizes are probably attainable in Great Britain in what are perhaps our most obvious national reserves: in the Lake District (the whole of it), a part of the Grampians, the Trossachs, Snowdonia, and Dartmoor and Exmoor together with the Devon and Cornish coasts.

In so large an area as a national reserve neither motor roads nor railways are incompatible with amenity: indeed it would be difficult to find here a large enough area that had not these already. There should, of course, be definite limits to transport development. Roads and railways should be as few as possible. *Some*, however, will be necessary for accessibility and management: the area cannot entirely be reserved for the young and active Rambler: the cyclist, the middle-aged and infirm who use motor-cars, will require the right to pass through it: policing, catering, fire prevention, and other services will require good access to the various parts of it. Those requirements should be provided for. But generally the railways, motor roads, and parkways leading to the reserve should concentrate on the one or two towns that will be developed as 'gateways', and should terminate there; and inside the reserve a few roads, scenic in character and unsuitable for speedways, should be constructed cautiously. Especially, the opening up of through-traffic routes will need to be avoided.

In the 'gateway' towns should be gathered the accommodation facilities for visitors: hotels, hostels, boarding-houses, permanent camping grounds (under careful organization and proper sanitary supervision), recreational facilities, playing fields, places of amusement; and in general all the more sophisticated appurtenances of modern holiday making. In the reserve itself only such developments as are absolutely necessary should be allowed, and they should be of the simplest kind sited in the least obtrusive manner: a few shelters, an occasional over-night camping ground (again, properly regulated), bothies and huts for mountain climbers and such like. Bridle ways and footpaths should be left in their natural state.

All these things will need careful planning and organization. And there will need to be clear regulations on many matters, such as the lighting of fires, fishing, trespassing, and damage to fauna and flora, which will require a staff of wardens for their enforcement.

There should perhaps be half a dozen or so national reserves in Great Britain. There should be numerous regional reserves. These generally will be much smaller, but they should nevertheless be of sufficient size, or a number of them should be sufficiently close together, to furnish at least a day's walking of say 20 miles: that is, providing a varied circuit, not necessarily a continuous bulk, of 20 miles. Having regard to their intention of serving a special locality, and to the limited scope which they provide, their proximity to the towns they are to serve is of great importance. The remoteness, within certain limits, of a national reserve where people may spend a long holiday, is of little consequence; but the situation of an area which is to provide a day's or at most a week-end's walking, is a prime consideration in its establishment. The regional reserve should be as close as possible to its visiting population. Probably a greater distance than 20 or 30 miles, and certainly a greater distance than 50 miles, will render it comparatively useless, and, whatever the distance may be, it should be easily covered by inexpensive and rapid train or bus services, as well as by field paths and country walks.

Perhaps the most ideally situated regional reserve in England would be one established round the Peak, with Manchester 10 or 15 miles away on the west and Sheffield a similar distance away on the east and a number of other smaller towns within easily approachable distance. Other ideal Reserves would be the Pentlands and Moorfoot Hills for Edinburgh, the Pennines for the Lancashire and Yorkshire industrial towns, the Chilterns and the North Downs for London. And so on.

America provides a perfect example of a fully developed regional reserve in the Bear Mountain Park which serves the New York region. It is situated some 30 miles or so away from the centre of the city and is easily, quickly, and pleasantly reached by rail, road, and river-steamer. It comprises an area of over 35,000 acres (55 sq. miles) of forest land on the shore of the Hudson River. Around the main entrance to it, by the river shore, are situated recreation grounds, accommodation facilities, car parks, and so on. Beyond stretch miles of undulating forest crossed by only one macadamed road but intersected by a great number of footpaths, or 'trails'. Around several lakes there are camping grounds, and here and there are rough shelters, supplied with pure water from springs and wells, and containing open fire-places, cooking ovens, and bunks for overnight campers. Already, after only a few

years of existence, this great area has become so popular that it is taxed to its full capacity for camping accommodation, and similar reserves are having to be established all around New York to cope with the present demand—a state of affairs which should inspire confidence in establishing them here.

Germany, too, and Austria, provide striking examples of public regional reserves, generally forest-lands, in the neighbourhood of large cities.

Because of the smaller area of these reserves it is desirable that no motor roads should penetrate their interior, but in other directions they could probably be organized in the same way as the national reserves, though on a smaller scale. They should be opened up by footpaths and bridle roads: occasional camping grounds should be provided, and accommodation and recreational facilities might be provided in the 'gateway' villages.

Local reserves will vary in size, character, and intention. They will comprise any kind of scenic feature that will provide relief against the town, and they should provide for the greatest diversity of interest, though they should be kept purely rural in character. They should, of course, be outside the town (see Chapter X), but within easy walking distance of its centre.

Regional and local reserves will serve their purposes better if they are linked together, and to the towns they serve, by some pleasant means of access. The pedestrian is already almost entirely driven off the roads. Eventually if footpaths are provided for him alongside them in some pleasant way as was suggested in the last chapter, he may be able to walk there once again with a certain amount of comfort. But there will always be noise in his ears and stink in his nostrils. Undoubtedly some special provision will have to be made for him in the countryside, for pedestrians are a greater proportion of the population than motorists, and they *have a right* to special consideration in a civilized community. What better provision could be made than by field paths and country ways that begin at the very edge of a town and run out to, connect together and pass through the country reserves, making it possible for one to walk for miles through changing, living country, with only the occasional necessity of crossing a busy highway? Our existing field paths, the envy and delight of the foreigner, provide a lovely and exciting background upon which a complete system of pedestrian tracks could be built. They need to be rationalized, inter-related and extended. A footpath should run alongside practically every river and brook—(are not the frequency and charm of these one of the peculiar delights of our well-favoured countryside?)—along

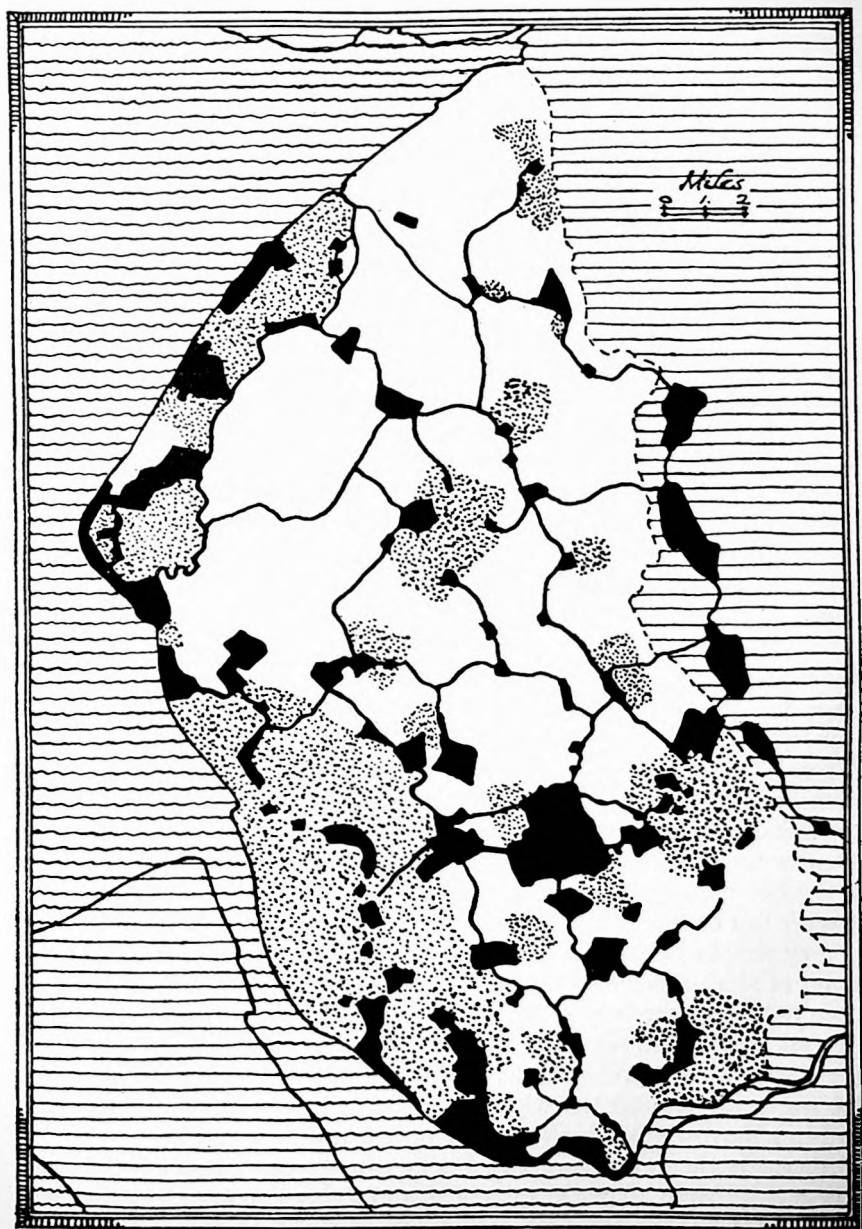


FIG. 18. A system of regional and local reserves and footpaths.
Urban areas dotted: reserves in black.

every high ridge and by every stretch of sea-shore. And as footpaths are established they may *sometimes* be planted irregularly with bordering bushes and trees, so continuing again after a long interval the conscious planting which made the English landscape what it is.

Though we need no examples to show us how delightful a thing a cross-country footpath may be, still another example from America may give us some idea of what can be accomplished in the way of its continuity.

'Probably the most notable trail in the east, and one of the best equipped with over-night shelters, is the Long Trail built by the Green Mountain Club to gain the summits and ridges of the Green Mountains of Vermont. More than fifteen years have been spent developing this trail, which now extends 230 miles from the Massachusetts line to within a few miles of the Quebec border. A similar development is the trail of the Appalachian Mountain Club in the White Mountains, which has a length of 300 miles but is not so completely equipped or connected. These trails are kept up chiefly by the private funds of the walking clubs. Much of the work has been done by club members, both in clearing the trails and constructing the shelters. They contribute a valuable addition to the facilities of outdoor recreation.'¹

Here are models at which to aim!

3. ACCESS

In all this matter of the establishment of country reserves there looms large the question of ownership. It is an involved and difficult question, but we must touch on it briefly.

For all the types of reserve, but particularly for the country footpaths, the chief thing is access. What is wanted of the areas is the right to walk across land simply for the sake of taking the air, enjoying the scenery and indulging in the recreational exercise of walking. There is neither the necessity nor the desire to take the land comprising a reserve out of productivity or agricultural use and let it be sterile that it may simply be walked over. That would be undesirable from the point of view of both agriculture and public enjoyment. The Rambler does not want merely to walk across a deserted field or moor, he wants to walk over it and see the cattle grazing upon it. He wants access to the country, its sounds, sights, smells; its life, not merely its scenery. He wants also to feel the width of it and not be enclosed continually within a narrow space by hedges or post and wire fences.

Access is theoretically of two kinds, namely, open and unrestricted access—the right to walk anywhere and everywhere within the area made accessible; and limited access—the right of passage over certain

¹ *Regional Plan of New York*, vol. v.

defined and unenclosed routes for the enjoyment of the amenity of a much wider area than that which is actually traversable. The first kind is typified in many commons and in town parks like Hyde Park, and the second in the normal field paths of the country and in 'ornamental' town parks.

In the country reserves, both kinds of access will be required, even over similar types of ground. In some unenclosed areas, like moorlands, the rambler should have wide spaces where he can roam at will, in other similar areas it will be desirable that he should be kept to certain routes. In most woodland areas limited access only will be desirable. In all field paths (allowing for a small wedge of land here and there for a picnic ground) access will need to be strictly limited.

Both these types of access might be obtained without the public ownership of the land. Unlimited access, on the wild places where it would be generally granted, need not interfere with the use of the land for rough grazing. Nor need limited access interfere even with intensive farming—if it remained limited access. Often, however, it does not. For a certain type of person lack of enclosure means lack of restraint. Everywhere landowners complain that public access is definitely detrimental to their interests. The rambler who likes to see the cattle grazing may leave the field-gate open for them to stray through. One walker over a moor may set miles of heather ablaze in his carelessness. Even on land in public ownership access is sometimes regarded as incompatible with the purpose for which the land is held. The vast water catchment areas owned by many public and semi-public bodies would seem to be places over which passage might freely be allowed. But though rights of access were once willingly acceded there, they are now strongly opposed. Similarly in forestry areas public access is generally regarded as dangerous. And so in other instances. Allowing for a conservatism which tends to exaggerate the damage that is done, it must be admitted that the public's attitude towards the facilities provided for it is often lamentable and that the rights which are afforded it are often grossly abused. It is probable, therefore, that the introduction of such outdoor facilities as are here suggested will meet with opposition and obstruction from landowners. It is probable that their introduction will have to be but gradually accomplished as an improved public consciousness grows; and it is certain that it will have to be accompanied by the rigorous enforcement of protective by-laws.

No one would wish to see legitimate and beneficial agricultural interests handicapped or interfered with. There are, however, certain vested interests that are too fantastically selfish to be given much



tender treatment: the interest of the handful of men who for two or three days sport in a whole year will keep thousands of acres of healthy moorland secluded and closed to the teeming population of a neighbouring city: or the interest of another half-dozen who will closely preserve highland areas at the rate of five or six hundred acres per individual huntable stag. In these cases there is no doubt which interest should be sacrificed if sport and public access are incompatible.

On the other hand there is a type of country estate which deserves very special treatment and is highly worthy of preservation. Every one must deplore the rapid disintegration which is overtaking the large private parks of the countryside. Crippled by taxation, their owners are often forced to sell them in small lots. They are bought for bungalow development or small-holdings; their venerable trees and great expanses of smooth sward that have through generations of devotion been brought to a condition of perfection, are annihilated in the course of a few weeks. They are too expensive to be bought outright by local authorities. But often the purchase of rights of access might save them and give the public all that was required for their full enjoyment, while the owners still remained in possession.

4. COMMONS

Practically the only rural open spaces at present existing, with the exception of the few areas, totalling some 30,000 acres, which are in the possession of the National Trust, are the commons which we have inherited from a long-discarded agricultural system. These commons provide a most useful background for the building up of a national system of country reserves. We have already sketched a brief outline of the gradual absorption of the once vast areas of common land into private possessions, as a new system of farming, which completely changed the face of the country, was built up in the eighteenth century. It would be pleasant to recount here the titanic struggle which, beginning with opposition to the attempted enclosure of Wimbledon and Epsom commons in 1864 and culminating in the battle royal over Epping Forest a few years later, eventually saved the remaining areas for the enjoyment of the nation. But that would be out of place and the story is already well known. It is sufficient to say once again that all sections of the population to-day owe a debt of deep gratitude to Lord Eversley and the Commons and Footpaths Preservation Society to whom the existence of the commons that we still have is almost entirely due.

Existing commons comprise between 1,600,000 and 1,750,000 acres of land distributed most unevenly over all parts of England and Wales.

England possesses the greater part of this, some 1,250,000 acres. Of this again more than one-half, or some 689,000 acres, chiefly mountain and moorland, is situated in the eight northern counties of Cumberland, Northumberland, Westmoreland, Durham, Lancashire, Yorkshire, Cheshire, and Salop. Two southern counties, Devon and Hants, have 250,000 acres between them, and four others, Cornwall, Dorset, Somerset, and Surrey, possess 160,000 acres. This leaves the remaining twenty-four counties with only about 167,000 acres or less than 14 per cent. of the total.¹

The leading arable counties have naturally but little common left to them. From the point of view of national reserves this concentration of commons in the wild country that is favoured by the modern nature-lover is fortunate. From the point of view of many populous regions, however, it is unfortunate as regards regional and local reservations. The midland counties, for instance, possess but the smallest extent of common, and densely-populated counties like Staffordshire, Nottinghamshire, Leicester, Northampton, and Warwick have hardly any at all.

Common land is not common property unless all rights in it have been acquired for the public. It is private property from which certain persons other than the owner have the right to extract certain things, perhaps pasturage by the mouths of their cattle, or furze or heather for litter or fuel, or peat, or perhaps sand or gravel. Nevertheless, commons, though they are private property, must be kept open at all times for access by the persons who hold rights of common.

At common law the public, as distinct from the particular body of commoners having rights on the land, has no actual legal rights of access. But under various Acts, and particularly through the recent Law of Property Act 1925 (Section 193), the public has now been afforded definite rights of access to all common land, in whatever ownership, that is situated in a metropolitan borough or urban district; and to any rural common to which the Act is applied by the lord of the manor. Earlier similar rights were afforded by the powers contained in the Commons Acts of 1876 and 1899 which make it possible for an urban or rural authority, *with the consent of the lord of the manor* or other owner of the soil of the common, and with the sanction of the Minister of Agriculture, to make regulation schemes providing, subject to the prevention of nuisances, for the public's having access to the common for air and exercise.

These powers, though they are everything that may be desired as

¹ Figures estimated by the Commons, Open Spaces and Footpaths Preservation Society.

regards urban commons, are unsatisfactory as regards rural commons. There, under all the Acts, the lord of the manor has a veto on public access and 'regulation' even if all the commoners and the public authorities desire to see those things afforded: though actually access (which it is practically impossible to stop over unenclosed and unenclosable land) does not matter so much as does regulation, which is necessary to prevent the nuisances that are likely to occur where people congregate. So long ago as 1913 a Parliamentary Committee recommended that 'the absolute veto of any person or group of persons upon a scheme of regulation should be abolished'. Until that veto is abolished the service that rural commons could render to the nation in forming a most valuable background for a great scheme of country reserves will never be satisfactorily employed.

5. NATURE SANCTUARIES

One of the terms of reference upon which the recent National Parks Committee was appointed was 'to consider and report if it is desirable or possible to establish National Parks with a view to the preservation . . . of flora and fauna'.

It is now generally considered that these things cannot be preserved absolutely in an area to which the public has general access. Something may ultimately be done by the enforcement of by-laws and by education to prevent the massacre of the common flowers which we have already spoken of as being a danger even in the everyday countryside; and less and less interference with wild animal life may similarly be achieved. Much more than this, however, is required by the naturalists who are interested in the preservation of flora and fauna. They require the preservation of the shyer animals against even intrusion upon them, let alone against interference with them: of butterflies and insects, plants and grasses of which the ordinary member of the public does not know either the name or the associations: of curious rocks and exposed geological sections that are purely of scientific interest.

The preservation of these things is indeed a special matter, perhaps of indirect importance to the general public, but of little immediate interest to it. As such it has but slight direct connexion with the subject of country reserves as we have considered it here, and it requires separate treatment by the establishment of closed sanctuaries in the localities that are required to be preserved.

INTERLUDE

This commercialism, with its barbarity of ugly decorations, is a terrible menace to all humanity because it is setting up the ideal of power over that of perfection.—SIR RABINDRANATH TAGORE.

CHAPTER VI

COMMON AMENITIES

WE have now examined some of the principal aspects of Landscape Design. But there are many other matters which affect the pleasantness of the countryside. Before passing on to the consideration of some of the aspects of Civic Design, we will consider these matters—which are indeed concerned with the pleasantness of the town also.

I. SMOKE

Coal is generally reckoned to be the foundation of England's industrial greatness: the asset which enabled her quickly to achieve, and long to hold, an unchallenged domination over the industrial world. It is also one of her discomforts; for the wholesale burning of raw coal is a danger to health and a menace to happiness. Atmospheric pollution by coal smoke is not only responsible for the enveloping pall that blots the sun out of our urban skies, so that it is said that Manchester receives only 55 per cent. of the direct sunlight which is received in a country district a few miles away, but it is responsible also, to a very considerable degree, for the adhesive and disorganizing fogs which have made English cities notorious throughout the world. It is not only responsible for direct damage to health through respiratory diseases, it has deplorable effects in its general cutting off of the vital physical benefits derived from direct sunlight. It is responsible also for enormous material damage, so that it is estimated that smoke damage costs Manchester alone over £1,000,000 a year. These things are all more or less measurable. What is not so easily measurable is the mental and spiritual damage, the sluggishness, melancholy and depression that result from the exchange of the bright penetrating candour of sunlit skies for a heavy, all-pervading greyness.

Even the countryside itself is not unharmed by this atmospheric pollution. The smoke pall from the towns moves over miles of open country; tarred and gritty deposits from West Riding chimneys continually fall to earth in astonishing bulk as far away as the western parts of the Lake District, having surmounted even the barrier of the Pennines.

It is generally believed that factory smoke is the chief if not the sole cause of this state of affairs. It is not so. Professor J. B. Cohen and Mr. A. G. Ruston in their book, *Smoke, a Study of Town Air*, have shown that when coal is burnt under ordinary domestic conditions no less than 6 per cent. of the total weight of coal escapes from the top

of the chimney in the form of soot, grit, &c. From a factory chimney only 0.5 per cent. escapes. Now 32,000,000 tons of coal per annum are used for domestic purposes: 100,000,000 tons for industrial purposes. The comparative figures are therefore these:

32,000,000 tons at	6 per cent.	=	1,920,000 tons of waste as smoke, &c.			
100,000,000	„ 0.5 per cent.	=	500,000	„	„	„
	Total	=	2,420,000	„	„	„

So that, on this basis, of the $2\frac{1}{2}$ million tons of the waste from coal burning that pollutes the atmosphere, very nearly four-fifths, or 80 per cent., is due to the domestic fire.

Sir Napier Shaw, head of the Meteorological Office, has concluded, from observations in London, that domestic smoke is responsible for about two-thirds of the total atmospheric pollution: a rather lower estimate, but still, surely, one sufficient to dispel the popular fallacy.

The first step on the road to a clearer and cleaner atmosphere is the realization that domestic smoke is the chief obstacle. It is so not only because it is far greater in quantity and far more harmful in quality, but because factory smoke is already decreasing. Because the production of excessive smoke is the result of an incomplete combustion of coal, that is, because it is a source of waste, continually growing numbers of works and factories are either altering or improving their steam-raising plant or are closing down altogether their smoky furnaces to use the cheaper and more reliable power supplied from electric-power stations. These latter, because of their efficient plant, produce much less smoke than the chimneys they put out of service. Further, this closing down is bound to be accelerated as the production of electrical power develops and as such works as the present electricity transmission schemes are carried out. Gas production also is likely to be rationalized, and it is probable that here, as in the electrical industry, super-stations will be built for large scale production and widespread distribution which will supply industrial power. With both these supplying agencies entering on a period of vigorous development, it seems not unreasonable to forecast that factory smoke will rapidly diminish within the next twenty years or so.

Still, notwithstanding this, it is likely that there will remain a number of factory chimneys that will issue polluting smoke. To these it will be necessary to apply restrictive legislation. That legislation already exists in the Public Health Act, 1875 (Section 91), and in the Smoke Abatement Act, 1926, which extends and in some respects amends the earlier Act.

Under the 1875 Act the emission of smoke in either of two forms is

deemed to constitute a nuisance. In connexion with the first form, that of smoke arising 'from any fireplace or furnace which does not as far as possible consume the smoke arising from the combustible used therein', the Act has been found to be unworkable and no attempt to take advantage of this section has been made for many years. The provision dealing with the second form of nuisance, that arising 'from any chimney (not being the chimney of a private dwelling-house) sending forth black smoke in such quantity as to be a nuisance', is, however, more workable and is sometimes resorted to by local authorities; but a considerable difficulty in obtaining convictions under it lies in having to prove in a scientific sense that the smoke complained of was actually 'black' in colour.

The Smoke Abatement Act of 1926 marks an advance on this by providing (in Section 1) that the emission shall be deemed to be a nuisance 'notwithstanding that the smoke is not black smoke'. The burden of proof is on the local authority to show that a nuisance has been committed, and failing some recognized standard this might be difficult; but Section 2 of the Act provides that Local Authorities may make by-laws prescribing what standard of emission shall be deemed a nuisance having regard to local circumstances and conditions. Though a reasonable standard does not yet seem to have been satisfactorily defined, its definition and establishment will undoubtedly become possible in the light of future experience; and its application should become equitable through the joint operation, which the Act encourages, of neighbouring authorities so as to secure uniform methods of practice and administration.

As regards the contribution to it by industrial smoke, atmospheric pollution shows, then, the probability of some considerable improvement. As regards the much larger contribution by domestic smoke it shows little or none: which means that the whole question more or less stands still. The problem of the two million tons of domestic soot seems at present almost insoluble. It has long been an acute problem. Even the Elizabethans were worried by it and unsuccessfully attacked it with characteristically vigorous legislation. It entails the complete alteration of the ingrained traditional habits of practically every member of the community. The blazing open fire lies very close to the hearts of the people of this country. It is the centre of gravity of the home. It is undeniably a thing of beauty: there is poetry in it, and colour: there is cheerfulness and comfort, and a brightness that has a salutary effect on one's mind. It affords better ventilation than any other method of heating. It is comparatively inexpensive. Even the stove-warmed Continental, though he thinks

it irrational, will easily succumb to its appeal. The ordinary Englishman will not easily sacrifice his open coal fire for any anthracite, electric, or gas stove or other similar contrivance. Not even if it were universally realized that, at most, but 20 per cent. of the heat of his coals radiate through his room while 80 per cent. flies out of the chimney, or that half or three-quarters of the coal that he uses is a sheer waste of valuable by-products. There are nine or ten million houses in this country, each one of which contains at least one coal fire. No one will suggest that it is possible to force people to scrap these fires and replace them by gas or electricity; or to put no fire-places in new houses. The open fire will undoubtedly remain. The way to tackle the question of domestic smoke is to find a fuel that can be burnt in an open grate, giving brightness and warmth without pollution. Some such fuels are already on the market, but they are mostly unsatisfactory in various ways. When these fuels are made marketable at a price comparable with that of coal, in a bulk that can be handled as easily, and of a quality that will give results equal to those of the traditional fuel, the problem will largely solve itself. Then it may be possible and desirable to legislate on domestic fires. Until then legislation will be neither possible nor desirable nor effective.

2. SPOIL HEAPS AND TIPS

Besides a murky atmosphere, the exploitation of our coal resources has given us, over vast areas, a scarred and mutilated landscape. Other industries have taken their toll of natural beauty: iron smelting, chemical production, glass making, brick-making, quarrying, and many another; but coal mining has been the prime mutilator. Great unescapable slag mountains, often fiery hot and exhaling a suffocating reek, dreary derelict areas of marsh and swamp; these are the natural accompaniments of the mining of coal.

Though their existence may be deplored they are inevitable. Various suggestions have from time to time been made for their avoidance: but none with any success. The favourite suggestion is that the waste material that forms the heaps should be utilized, by hydraulic packing, for the filling up of the seams from which the coal has been extracted, so serving the double purpose of avoiding alike the hills and the hollows, of using the extracted material to avoid the subsidence which is the natural result of its extraction. It is a fine, sensible idea: unfortunately it is not generally practicable. It has been used successfully in favourable circumstances, and has been known to reduce subsidence to as little as 10 per cent. of the thickness of the coal which has been extracted (generally the subsidence may be as

much as 60 or 70 per cent. of that thickness). But the favourable circumstances do not often occur. They require at one and the same time a suitable inclination of the mine, a roof and floor to the seam of such a nature as not to be affected by water, a stratum which is not broken up by faults, and an adequate and cheap supply of *suitable* packing material. The last of these circumstances is rarely present, for the material comprised in the ordinary pit heap is not suitable on account of its heavy clayey nature. This alone leaves one, and the chief, of the two purposes unachieved. Moreover, special methods of working the coal are necessary where hydraulic packing is concerned, so that, even if all the other circumstances were present, existing collieries would have to alter their methods of working—a difficult business. Instead then of the stone of hydraulic packing killing simultaneously the two ill-visaged birds of spoil heaps and subsidence, it is not even generally capable of killing either of them.

Inevitable as they are, however, colliery tips are capable of some control and direction. They have in the past been made more desolating than they might have been had certain measures of organization been exercised. And naked and ugly though they now stand, that does not mean that they must forever stand so, or that they are bad beyond all hope of improvement.

The question falls naturally into two sections: (1) the possible control of the position, shape, height, and formation of future tips, and (2) the clothing of dead or idle tips so that they may harmonize with the landscape.

The spoil heap is likely to endure long after, centuries indeed after, the pit that has created it has been worn out and dismantled and has completely disappeared. That being so, all questions relating to it and to its ultimate appearance in the landscape in which it is to be permanently set are matters worthy of the most careful consideration and planning. To-day not the slightest consideration is given to them, nor has there ever been. The spoil heaps that we now have are the result of a most callous casualness.

The locality of a tip is, of course, more or less pre-determined. It has got to be reasonably near the shaft and the screens, which are fixed. Its exact position, however, its height, and its shape, are matters which can be determined of themselves. In determining them with an eye to their aesthetic effect, everything will depend on the character and peculiarities of the surrounding landscape. Except that the modern method of tipping in a great conical mountain is even worse than the old method which created low and easily convertible heaps, no general principles can be laid down with regard to them. But that

much can be done to render them comparatively inoffensive is proved by the classic example of the pit in the park of Temple Newsam, near Leeds, where the buildings and the spoil heap have been so sited and so controlled as to be entirely unobtrusive and without detrimental effect on the local amenities.

The spoil heap that is daily used for the disposal of a living industry's waste material is an unfortunate necessity which must be tolerated; but a dead tip which still rears its grey artificial bulk in all its ancient nakedness though it has lain idle for years and will never again be used, is a thing not to be borne without some effort being made towards its improvement. In all the older coalfields there are hundreds of these tips. Some of them have lain idle for fifty years: yet still they stand as naked and brutal as on the day when the last tub of waste was tipped on them. (Often, too, the dismantled buildings still stand by them, gaunt, ugly, abandoned shells of brick or stone, in all stages of a dreary dilapidation.) They seem to belong to no one, unsightly memorials of an uncouth age. In a county like Durham where the long-worked coalfield is now rapidly dying, the fine rolling upland landscape is pitifully scarred with hundreds of these dead heaps. Never a hand has been lifted to cover their shamefulness. In the last ten years nearly a hundred pits have been abandoned in this county alone. Yet not one day's work has been spent on leaving any one of the spoil heaps in a seemly condition—and this, in an area where nearly half the working population is unemployed. Here, as usual, even tidiness, let alone beauty, is nobody's business if it costs a little money.

In mining leases it is customary to provide that within a certain time after the expiration of the lease the spoil heap shall be removed and the land that it covered shall be restored to its original condition; or, as an alternative, for payment at a specified rate for all land left unrestored. Because of the expense and difficulty of disposing of the spoil, colliery companies invariably avail themselves of the second condition. Attempts have been made to work within the first condition by spreading the waste on land from which the soil has been removed, the soil being returned when the waste heap reaches its determined level. When, however, experience has shown that the land thus restored is of less value than the cost of producing it, such experiments have quickly ceased; for what industrialist worthy of the name would spend good money on such an uneconomic business as clearing up or even hiding his own mess?

The good money required to be expended is really but very little. All that is necessary to clothe the shocking barrenness of the heaps is

a thin covering of soil; just sufficient to give a root depth for grass. Even without a soil covering at all there are some heaps that will nourish a few hardy species of trees and shrubs if a little attention is given to the planting of them. A very little research by expert arboriculturists would soon determine what species of trees are suitable for planting and what are not. The results obtained by the one body which seems to have tackled the question are surely sufficiently encouraging:

'Much good work has been carried out in South Staffordshire under the auspices of the Midland Reafforesting Association, which has, during the last twenty-two years, dealt with some 14,000 acres (of pit heaps and areas of industrial waste) and has found that on this seemingly unpromising ground it is practicable to grow alder, wych-elm, birch, robinia, ash, sycamore and other British trees together with such shrubs as elder, gorse and broom, while in the course of a few years the bare surfaces cover themselves with wild flowers and grass.'¹

And the results of an isolated piece of reclamation at Brynmawr in South Wales, where university students and unemployed miners have converted a pit heap into gardens, show also what can be done.

Here, then, is much noble work. There are great areas of mined country in South Wales, Lancashire, Yorkshire, Durham, Northumberland, and half a dozen other counties, that might be reclaimed for pleasantness, where, with small effort and a little money expended, 'the desert shall rejoice and blossom as a rose'. By whom should it be done?—that is the question which is likely to cause most difficulty. The industry that has wrought the damage is on the verge of beggary. There is little hope of any action from it. But at any rate it should not be allowed to hold the public up to ransom that its mess may be cleared up. Most of the spoil heaps are of no value whatever (a few have some small value as paving material for tennis courts, &c.), and they could reasonably be commandeered for the nation without any question of compensation.

More shameful than any spoil heap of industrial waste (which is generally unavoidable) is the putrescent abomination whereon a Public Health authority tips its scavenging refuse. The refuse tip of a small town or village is repulsive enough. But when great cities like London and Liverpool abandon their destructors and raise gigantic dumps of an indescribable foulness in their neighbouring countrysides, because it is cheaper to dump than to destroy, then the word 'progress' seems to have no meaning. And when such proceedings are countenanced and approved by the Ministry of Health (which

¹ H. V. Lanchester, *The Art of Town Planning*.

is also the Ministry for 'town- and country-planning' and for 'amenity') one ceases to wonder at the grotesque inefficiency of much of modern local government. This sort of thing should be entirely prohibited. It is gross, indefensible barbarism. And while it is the example set by authority, what hope can be entertained of civilized conduct on the part of private bodies or individuals?

3. THE POLLUTION OF RIVERS AND STREAMS

Of all pleasant natural features, water, whether it is in the form of the calm mirroring depths of a lake or a slow river or the singing shallows of a diminutive stream, holds a special fascination and charm for all men. How strong is the instinct to lean over the parapet of a bridge and let time slip by in the contemplation of mere water! And how favoured is England above all other countries in her rivers and streams!

But for several generations now we have looked on hopelessly and inactively at the gross defilement of this pleasantest of natural features. We have let the pure waters that showed us beauty and gave us pleasure, that fed our bodies and kept them healthy, be turned into instruments of destruction, into things of revolting foulness. Long ago the streams that ran through mining districts and manufacturing areas were transformed into loathsome channels of hot reeking liquids. In Durham one can see woodland streams running steaming hot, miles away from the pit that has defiled them. So in Lancashire, Yorkshire, South Wales, and elsewhere. Long ago also sanitary 'science' gave the multiplying populations the means to turn rivers into open sewers, full of excrement and all manner of foulness, and to-day as yesterday they are fouled and made beastly not only by towns and villages on their banks, but by those 5 or 10 miles away. Every year there are thousands of cases of flagrant and gross pollution. It is almost safe to say that there is hardly a river in the country that does not at some point receive such pollution as renders its course foul for miles. Not only does that mean the ruin of the delight that rivers should afford to man: it means the blighting of vegetation, the poisoning of animals, danger to public health, loss of water-supply, and the destruction of fish life. And instead of any improvement with years of experience, matters get worse as new processes of manufacture are discovered and are allowed to be practised without check.

Since details are more convincing than general descriptions, here are one or two examples recorded by the Pure Rivers Society, in the Year of Grace, 1929:

'In September, reports began to come in of thousands of dead fish in the Nene

between the Central Sugar Beet Factory and Peterborough, and carts had to be requisitioned to clear them away. In spite of this, decaying fish so fouled the river that the Bathing Place had to be closed. Members of the Fishery Board reported that it would take twenty years to make good the loss. By the end of October it was reported that mills on the river had been left, owing to the stench from the polluted water. . . . The case of the river Ouse was equally bad. Many thousands of fish were killed and it was stated that there was not a living thing in 20 miles of water below Ely. Grave fears were expressed that an epidemic might follow the pollution of the drinking supplies. The smell along the river was described as being like the trenches at Gallipoli. . . . The destruction in the Witham also was terrible and press reports stated that many tons of fine fish were destroyed, the destruction even extending down into the tidal waters where smelts and flat fish were killed.'

All this damage was done in a purely agricultural district by a new industry which is being subsidized by the public at the rate of nearly £40,000,000 over a few years—under the patronage of the Minister of Agriculture and *Fisheries*!

Another example illustrates not only what abominable forms pollution can take and what effects it can have, but how drearily hopeless it seems to be to attempt to deal with it under existing laws. This again refers to a new industry established in a purely agricultural area. In 1925 an artificial silk factory was set up at Stowmarket, in Suffolk, near the head of the Gipping, a small river which runs a total course of about twenty miles before it joins the Orwell near Ipswich. In the latter part of that year complaint was made by the County Council that the discharge from the factory was giving rise to sulphuretted hydrogen (which every schoolboy knows to be peculiarly offensive). The owners stated that apparatus was being installed to prevent this. By mid-1926 nothing had been done, cattle were being affected and great pecuniary loss was being suffered by farmers who were dependent on the river water. By December 1927 Government representatives were in conference with local officials and the factory owners. By mid-1928 pollution was worse than ever. For miles below the factory the river stank foully and unendurably: fish were poisoned by the thousand and were taken out of the river dead and rotten ten tons at a time. Every living thing in the stream, including plants and insects, was destroyed. The inhabitants were suffering from sore throats and from vomiting caused by the stench: they dared not open their windows: they were leaving their houses to sleep out in the open, far away from the river, or were abandoning them altogether. Cattle sickened: poultry died. The machinery of works twenty miles away was being thrown out of gear by the polluted water. Buildings were

being rotted. Property and life was depreciating. It was like the visitation of a plague of Egypt. Nothing was done. The local authority could take no action without the consent of the Ministry of Health, and when, eventually, a local Government inquiry was held, the inhabitants were naturally becoming infuriated by the delay. Evidence was tendered—there was plenty of it—and the inspectors said they were satisfied that gross pollution had taken place. Three months later the local authorities were informed that no action could take place because certain civil proceedings were pending. Nothing could be done by anybody; and it was not until more than a year later, in October 1929, four years after the commencement of the nuisance, that the evil was abated by means of a private injunction that was obtained against the factory causing the pollution.

These were cases of new factories in newly industrialized areas. The pollution that had gone on for more than half a century in the old industrial areas naturally continued in the same old way. Evidence cannot be offered as to fish being killed there. They were exterminated long ago. But an instance recorded at a *health* resort in mid-Wales where a gas company so polluted the river Ithon that 'one witness alone testified to removing 2,000 dead salmon parr and 661 dead trout from the river', may help one to conceive what was happening in the *industrial* areas.

Pollution arises from numerous sources. A few may be mentioned. There is pollution by coal mines and lead mines over vast semi-rural areas, a pollution which affects not only the effluents of rivers and streams, but through the smothering and choking up of land drains and watercourses with dust and fine waste materials, is responsible for widespread damage, so that, it is stated, 'in Southern Wales (and elsewhere) large areas of once rich pasture have been destroyed by this cause and over a course of years have been converted into sullen and sour bogs, of no use to man or beast'. There is pollution by all manner of urban industrial concerns too great and too varied to be particularized. There is gross and widespread pollution by sewage from sewage disposal plants large and small which are not, and in many cases never have been, even indifferently efficient. The local authorities that are responsible for this are frequently responsible also for pollution by the tipping of refuse along the banks of streams. Then there is pollution in purely rural districts from agricultural industries, from the beet sugar factories which have just been mentioned and from milk and cheese factories. And there is an extensive pollution by oil and tar from roads alongside and in the vicinity of streams, though this does not affect the appearance of a river, but only the fish life.

Practically all forms of pollution are avoidable. Plant may be installed to purify almost any trade effluent. It may be more profitable for a manufacturer not to have this plant, as it might be more profitable for him to work with slave labour; but, while no one but a rabid crank would prejudice the prospect of the country's industrial welfare to avoid river pollution, there is to-day an accumulation of scientific knowledge which makes pure rivers compatible with industrial prosperity. As for pollution by sewage there is absolutely no excuse. Various methods exist, and have long existed, for rendering the disposal of sewage harmless and easy, and it is obviously the special duty of local authorities, which are charged with the responsibility of maintaining a pure water-supply and the general amenities of life, to see that these are not endangered by inexcusable inefficiency in another department of their responsibility.

The law on river pollution is both involved and ineffective. The most important piece of legislation is the Rivers Pollution Prevention Act of 1876, which declares pollution to be an offence, and empowers local sanitary authorities to enforce its provisions; subject, however, to their obtaining the sanction of the Minister of Health before a prosecution be undertaken, and subject to the numerous exemptions and provisos with which the Act is hedged about. These exemptions and provisos alone make successful prevention hopelessly difficult, and as the local authorities that are charged with the enforcement are themselves among the worst polluting agencies, it is easily understandable that the Act has been steadily ignored. A further cause of its ineffectiveness lies in the fact that while one local authority may enforce the Act over the water in its own area, its neighbouring authority may fail to do so and so entirely nullify its actions.

There is also protection in common law, as regards the rights of the private persons who own the rivers. Since, however, the cost of High Court proceedings will almost certainly run into thousands of pounds, this safeguard is of as little value as the special Acts.

Nevertheless, given certain adjustments of the responsibility of enforcement, the present law could be used with good effect. Every Royal Commission (and there have been many since attention was first directed to the evil some seventy years ago, and one sat for no less than seventeen long years!)—every Commission, Select Committee, Departmental Committee, or other body that has studied the question has recommended with notable unanimity that the evil can only be successfully dealt with by one single authority or board being made responsible for each river or group of rivers, throughout its entire course; with one central authority co-ordinating, supervising, and

adjusting the general work. That was first recommended long ago. And though all interested bodies call out for its being done, it still remains to be done.

4. OVERHEAD WIRES

Though the overhead transmission of electrical power by high-tension cables supported on immense steel lattice pylons is perhaps the most regrettable of all the new works undertaken in the countryside, it must, in the main, be accepted as inevitable. The choice, if there is any, is not between overhead and underground transmission, but between overhead transmission and none at all. Since the beginning of the work the Electricity Commissioners have maintained that the great disparity which exists between the respective capital costs of overhead and underground cables leaves no question as to which method of transmission must be adopted. An analysis of the returns made by over 200 undertaking authorities who were supplying electricity in rural areas at the end of March 1930 showed that the average expenditure up to that date on high-tension systems in general was upwards of £1,000 per mile for overhead wires as compared with £1,600 per mile in the case of underground mains, a difference of over 60 per cent. The expenditure in the case of low-tension systems in general was upwards of £560 per mile as compared with over £1,100 on underground mains, a difference of about 100 per cent. Estimates of the comparative costs in March 1932 showed a still greater disparity, as in the following figures per 100 yards:

<i>Voltage.</i>	<i>Overhead lines.</i>	<i>Underground cables.</i>
	£	£
33,000	42-57	160-200
11,000	20-31	68-102
400/230	28-31	34-71

In the face of these figures it is hopeless to ask for underground transmission, and in face of the alleged benefits of cheap electricity it is asking for trouble to doubt the necessity for such transmission schemes at all.

The question is obviously one for experts. Lay criticism has been reduced to silence by the experts interested in the schemes, and there has been a good deal more than a suspicion of unwillingness on the part of the undertakers to co-operate with the public on the question of amenity. And, though there has been no authoritative and impartial statement, as might have been expected, from any body of disinterested scientists of repute, the work has gone ahead in various

parts of the country, and is now well on the way towards completion. There is, in fact, little more to be said. Much of the work already exists and we have got to accept it.

These works have been likened to those of the railways, which were for long seriously opposed as destroyers of beauty (see Wordsworth, *The Projected Railroad between Kendal and Windermere*, and Ruskin on the railway to Bacup in *Fors Clavigera*). There is little likeness. They were wounds that time could heal. Whether they were raised above the level of the surrounding ground or cut in a gulley below it, they were solid and of the earth. These are between earth and sky: insecurely related to either. They can never be softened: they are irredeemably mechanical. They can never be hidden. Unfortunately and fortunately we may gradually get used to them—as we can always get used to loss of beauty if there is some small material compensation—or even if there is not.

5. ADVERTISEMENTS

The traveller southwards from Scotland follows a great road that climbs over the windy heights of the fells that connect the Pennines with the mountains of the Lake District. Climbing over those heights he may reasonably assume that for a little while he has left behind all the trappings of civilization (except his own car), and that he may now let his senses bask in 'the sleep that is among the lonely hills'. He has passed some miles back the last untidy garage, and the great quarries that have eaten away a few of the lesser hill-sides. All his distance is now framed by peaks: all his expansive foreground changes in the rolling, free undulations of the moor. Steadily, steadily he rises. Even his engine, throbbing rhythmically, seems to deepen the peace. On he goes. He nears the summit, high, lonely, remote. Nothing of men's influence anywhere here except the road along which he travels. Here is the rock-bottom of Nature. Then, suddenly, as though by a blow between the eyes, his whole being is battered and shocked. His peace of mind is annihilated: his sublimated sensations at the vast mountain panorama are shattered in a single instant. There, in that place, like a dirty and profane beggar blaspheming in a cathedral, a great wooden sign in the shape of an open book, which would be crude even in the meanest industrial town, invites him in 5-foot letters to 'Come to B——'. Outraged, bruised, and tormented, he goes on as though with the cackling laughter of devils in his ears. And for miles and miles he descends through an enchanting landscape blinded to it by shame and resentment at that disgusting advertisement of a disgusting town.

And supposing, after that warning, he is fool enough to go to B——, what does he find there or in any of the towns he passes through getting there? On vast hoardings at every street corner, on the end-gables of streets, on roofs, on flags flying from windows, everywhere in all places that his eyes cannot avoid he sees advertisements bullying him to come here, go there, eat this, drink that, sleep at this place, dance at that, be tailored by this person, be buried by that other, buy this, that, and everything in maddening iteration, contradiction, and reiteration. If he passes through a large city he will see, by daylight, buildings plastered and half hidden by crude advertising apparatus; he will see by night that same apparatus converting the place into a City of Dreadful Light, exploiting the reticent darkness with a monstrous ingenuity.

The hand of commerce touches everything, and defiles everything it touches by advertisement.

The people must indeed be powerful to be pursued and supplicated thus by their servant the tradesman. They must be weak indeed to let this supplication rise to such intensity that it becomes not supplication but clamorous menacing and threats, brow-beatings and bullying in the streets and public places.

Advertisement, though on anything but the smallest scale it is of very recent origin, must be acknowledged to be a necessary adjunct to commercial activity. Except in the most primitive communities where every person is in immediate contact with every other, it is obviously necessary in some form or other under all conditions of commerce. A man has a pig for sale. It is both in his own and in the public interest that this should become known. The proclamation of the fact that there is a pig for sale is not only advertisement, it is news. Similarly, a certain play is being performed at a certain theatre. An announcement to that effect is also both advertisement and news, and it is in the interest of the public that the news should be made available in a place where the public is accustomed to find the news.

To-day that place is in the public newspapers. The man who wants to learn the news can do so by referring to that place; if he has no interest in it, he can avoid it. Newspaper advertisements use no tyranny, they do not beset and belabour a man in places where he would be away from them and would indulge his other interests. They violate no sanctities. They ask, but do not compel attention; and they ask in fit seasons and in fit places.

The whole purpose of the poster advertisement, on the other hand, is tyranny. It proclaims no news: it serves no public interest. Rarely, if ever, does it announce that So-and-so has such and such thing for

sale, which is news. By the use of a catch-word it seeks to fix in the public mind the existence of a particular article—Boxo, Golder's Cigarettes, Pearlright Soap, or some other—to fix it forcibly by continued and unending insistence upon it in all places and at all times. The advertiser who rents spaces on hoardings or walls has but one purpose. He seeks to violate the wayfarer's mind. He cares not how he does it. He will violate for his own base ends the deepest emotions, the innermost recesses of the most cherished sanctuaries. He would penetrate to the very altar of the church itself if he could. The central doctrine of his 'faith' is that no one must ever be allowed to forget his existence.

And although he is one of the most debased members of civilized human society, he is jealousy protected by the law and fabulously enriched by the public. It would seem reasonable to assume that to assault a man through his eyes is as great an offence as to assault him through his other senses. The touting salesman who besets a person in a public place even with calm persuasiveness, let alone with inordinate din, is regarded as an intolerable nuisance and a disturber of the peace, against whom the public must be protected. The causer of a noisome smell is similarly a fit subject for punishment. But he who assaults the eye may do what he will, the rights of private property protect him—unless, indeed, he seeks to corrupt sexual morality, which is so much more important than beauty, comfort, and pleasantness.

This conception is old and firmly established in common law. In 1587, Chief Justice Wright declared in the case of *Bland v. Mosely* that 'for prospect which is a matter for delight and not of necessity no action lies for the stopping thereof'. Exactly three hundred years later, in 1887, Mr. Justice Chitty said, in *Foli v. Devonshire Club*, that 'the law is well settled that a mere amenity such as that of a view cannot be protected', and about the same time Lord Blackburn, in *Dalton v. Angus* (1881), declared that 'a right to have a prospect can only be acquired by actual agreement'.

This would indeed be one of the instances in which the law merits Sam Weller's description of it, were it not that common sense has eventually found its vent in Parliament, and so, through the Advertisements Regulation Acts of 1907 and 1925,¹ on the Statute Book. Under those Acts some considerable control of disfiguring advertisements is now theoretically possible. By them, certain local authorities *may* make by-laws 'for regulating, restricting, and preventing within their

¹ Promoted by 'Scapa', the excellent society that deals with the prevention of disfigurement by advertisement.

district, or any part thereof, the exhibition of advertisements in such places and in such manner as to disfigure or affect injuriously: (a) the amenities of a public park or pleasure promenade; (b) the natural beauty of a landscape; (c) the view of rural scenery from a highway or railway or from any public place or water; (d) the amenities of any village in a rural district; and (e) the amenities of any historic or public building or monument or of any place frequented by the public solely or chiefly on account of its beauty or historic interest'. Advertisements existing at the time of the making of such by-laws are exempted for a period of five years; railways, canals, and other public undertakings have some special exemptions; and the by-laws require confirmation by the Home Office. Somewhat similar measures of control are also obtainable by the making of a town-planning scheme.

Theoretically, then, there is now some considerable control. Actually there is but little. The intention of the Acts is continually whittled down or not applied. The first snag lies in the permissive nature of the Acts. Local authorities *may*, generally means that they will not. Thus by 1931, though most of the County Councils had made by-laws, less than 17 per cent. of the remaining authorities had done so. Then if they make by-laws, the Home Office regulations either limit their application or make them unworkable. The Home Office insists, for example, that all urban by-laws shall specify the exact portions of streets, particular views, areas of natural scenery, &c., which must not be disfigured. So that even the urban authorities that would, can't. And in Scotland the Secretary of State takes a still narrower view. He requires County Councils, when they deal even with rural areas, to specify and particularize every landscape, view, scene, and so forth that they wish to protect—a *reductio ad absurdum* that has made the Acts a dead, indeed a still-born, letter.

And then if, despite these obstacles, a set of by-laws does come into existence and is enforced, there are the Magistrates. If the advertiser is obdurate he has to be prosecuted. And the magistrates may take the curious view that they took in January 1931 at Uxbridge, in the case that has already been cited. The Middlesex County Council, it may be remembered, were prosecuting in some twenty or more cases of alleged infringement of their by-laws regulating advertisements. But, evidently because that countryside is not a proven and popular beauty spot, 'the magistrates ruled that an advertisement measuring some 6 feet by 4, bearing one word—the name of a famous brand of beer—and standing at the edge of an orchard along the roadside, did not constitute a disfigurement of rural scenery; nor, they went on

to decide, did a hoarding measuring 75 feet by 5, carrying the customary bouquet of posters, and standing so as to obscure the view of trees seen across a farmyard'.

By the time intention has struggled with these obstacles it has fallen a long way short of achievement. Not that there have not been some isolated achievements. There have been successful prosecutions in some six or seven counties. And the full benefit of the by-laws that have been made cannot be felt until the five years term of grace to existing hoardings has expired. But it would be blind foolishness to pretend that such permissive and continuously whittled down 'powers of control' can ever hope to attain the complete and universal regulation that is so obviously necessary.

Yet the business of advertising is, as its high priests frankly confess, still in its infancy. There are, literally, still wide fields for it to conquer. To-morrow to fresh woods and pastures new! And to-morrow there will be a new type of traveller to waylay. The roadside hoardings will still violate the land-traveller's mind, but some new method will be necessary against the traveller by air. Already in England we have had a taste of this new method. Not long ago there appeared on the face of a hill near Cissbury Beacon on the South Downs (which itself was only a few years before saved from the builder by public subscription) an advertisement cut in the chalk of the hillside in letters 45 feet long. This was intended for the traveller by land. Is it too much to imagine that similar advertisements cut in chalk, or built up in metal or concrete and painted brilliantly for daylight and illuminated in multitudinous colours for night time, will appear not only on hill-sides but on all types of land all over the country. It is not necessary to imagine it: the thing is already here, as the following extract from a gossip writer in the press indicates:

"Talking of parking cars, I suppose we shall soon see around London parking places for light planes, like the one I saw on a journey out of town this week. In great white letters of tin or zinc placed across a meadow was the notice "Old Barn's Tea House, Landing Place for Light Planes".'

This is the advertisement pure and simple. What a prospect it opens for violating the minds of air-travellers! Why should not 'Boxo' and 'Green Pills' be similarly advertised? But besides this straightforward advertising, there are other possibilities.

'Having no roads to follow, airmen sometimes lose their way and in cloudy weather it is often difficult for them to find out just where they are. To meet this difficulty the Automobile Association has worked out a scheme of "air signals" to which the Civil Aviation Section of the London Chamber of Commerce has just given its powerful support. The plan . . . postulates the name of

each town inscribed in letters of white concrete, 20 feet high by 16 feet wide, on the south-west side of the town designated.'¹

The average sign would be 70 yards long: Bury St. Edmunds would sprawl to 150 or 200 yards; while the sign for that ridiculous Welsh town with a name of some fifty or sixty odd letters would run to a third of a mile.

And what of the air itself? Some years ago we had the skies defiled by aeroplanes writing in smoke the name of a popular newspaper. To-day at every race meeting and great football match we have gigantic kites and balloons serving a similar purpose. What scope for advertisement the air offers! How crude and insignificant is a mere hoarding which is visible only for a quarter of a mile to people travelling along the ground, beside some electrically controlled apparatus hanging between the whole circuit of the horizons, dominating not only half a dozen towns and a wide countryside but a vast portion of space itself! Or if that is merely a fanciful possibility, consider this actuality which is adaptable either for earth or sky, and which is claimed to be legible at a distance of over ten miles.

'Experiments in writing advertisements and news upon the sky at night are being made from the roof of the Piccadilly Picture Theatre. The apparatus . . . under the right conditions is able to throw upon the clouds coloured and moving signs. The projection machine is fed by stencils, which can be made and reproduced in the sky as quickly as the words can be supplied by a creed tape machine. The inventor has found that lettering produces best when projected to a height of 3,000 feet. At this height a sign is estimated to occupy over 1,000,000 square feet of space. For success cloudy weather is needed. *The signs can also be thrown upon hill-sides.* A remarkable feature of the apparatus is that the illumination required is no more powerful than that used in any ordinary picture house. . . . At the moment the machines can be turned out at the rate of ten a week.'²

These are some of the possibilities we have to reckon on in relating the future of advertisement to the future of amenity.

Is it not obvious that promiscuous advertisement, on land and air and sea, should be *prohibited*, not regulated? In the country, at any rate, and everywhere in the air, it surely must be; for though there is as strong a case for prohibition in the town, we shall probably have to be content merely with its regulation there. There is practically no chance of the countryside's being rid of its hoardings until such prohibition is made universal and is placed directly under police authority. In the early years of this century, when the question of the control of advertisements first became pressing and the first Advertisements Regulation Act was passed, it was considered that the question was

¹ *Manchester Guardian.*

² *Manchester Guardian*, June 25, 1931.

in the main a local one, affecting only the interests of those who lived in the neighbourhood of the disfigurement, and that the local authority was, therefore, as the elected representative of the local inhabitants, the proper arbiter as to whether restrictions were necessary and as to where they should be applied. But conditions are now completely changed. The population has acquired habits of wide travel, and the countryside is no longer a series of local possessions: it is a national possession, and its guardianship is a national concern. Poster and similar advertisements serve no public purpose. In any corner of the countryside, in any part of the sky, they are offensive and injurious to amenity. It is right, therefore, that they should be universally prohibited by police authority. Of course public notices, announcements of things done or to be done on or in relation to the premises or lands on which they are displayed, must be allowed, as they are under the permissive Acts. It would clearly be unreasonable to forbid a man to announce his own business on his own property. This he must be allowed to do, though under stringent regulations against disfigurement, regulations perhaps similar to those now applicable to petrol-filling stations. It is the posters and enamel signs relating chiefly to proprietary articles that are unnecessary and offensive. They should be banished completely and immediately from the countryside.

Their place, if it is anywhere, is in the public newspapers—and there only. They have no proper place even on town hoardings. There may perhaps be a case for the retention of a few well-regulated hoardings in the town, where notices of public interest, notices relating to sales, entertainments, &c., may be displayed. But not even here should the advertisement of the proprietary article be allowed. It should be swept away from every public place.

One other type of advertisement remains to be briefly mentioned: namely, by the distribution of handbills. This seems to have lost most of the popularity it once had among advertisers, and it is already forbidden by by-laws in a number of places. It, also, should be universally prohibited by police authority. It is indeed a curiously ineffective method and is despised by the real 'live wire' of publicity. Not one in a hundred of the people to whom it is addressed takes any note of it. The handbill is thrust into one's hand. Down it goes on to the pavement, as litter.

6. LITTER

There was a time when the public's holiday pleasure was humorously measured by the amount of litter it left behind. Every Bank Holiday a new record was set up, a beastlier mess was made of the local

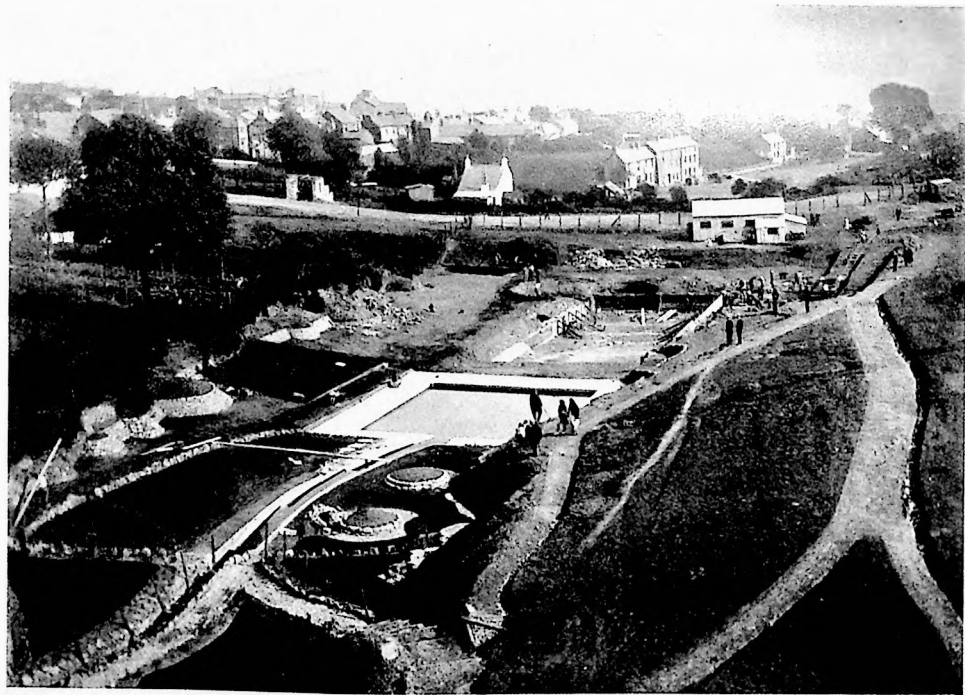
rendezvous and a still greater army of scavengers was commissioned to put things to rights again. People were almost encouraged to leave visible signs of their happiness. They are no longer encouraged. Values change; and when the evidences of happiness are no longer confined to Hampstead Heath or Epsom Downs, but spread in ever-increasing bulk over the countryside, it begins to be apparent that the measure is a false and extremely inconvenient one. He who would now reach Land's End from the last bus-stop must wade through an ankle-deep sea of litter. Box Hill justifies its name. The Hog's Back has become the Pig Sty. What was a bad joke even once in a while on Hampstead Heath is now a serious menace both in the towns and in the countryside.

But public habits are difficult to break. The press has implored its readers to reform. The very papers containing these appeals have swelled the volume of litter. Eminent persons have exercised their influence; with little apparent effect. The motorist in the Rolls Royce as well as the family in the baby-car, the tripper in the charabanc as well as the tramp by the roadside, still strew visible signs of their happy-beastliness abroad.

At bottom the question is simply one of elementary good manners. Litter is the result of the accumulation from an immense number of isolated small acts of thoughtlessness. The way to deal with it is in three progressive stages: by developing good manners, by making good manners easy, and by making bad manners unprofitable.

Education though it is a very sure method is a monstrously slow one, and some of us would like the countryside to be clean in our own lifetime. Nevertheless it must be the basic method. Appeals through press, pulpit, wireless, and any other medium, should gradually have an effect on some of the present generation, and eventually the present good work in the direction of social education in the schools should show some results. After all, the spitting habit which was once so loathsome has been pretty well stamped out.

But it is useless to incline people to tidiness and at the same time deny them facilities for exercising it. People cannot be expected to carry waste paper about with them for hours. The majority of local authorities are most culpably negligent in their provision of litter receptacles. One might almost say they get the litter they deserve. In the towns there should be a receptacle attached to every lamp-post and tramway standard. There at any rate it is easy enough to collect their contents. And though in the country it is a more difficult matter, even there a great deal more can be done in this direction than is done at present.



26. RECLAMATION OF A PIT-HEAP

Davies, Brynmawr



C. P. R. E.

27. ADVERTISING THE PROPRIETARY ARTICLE

Persuasion and facilitation may be the best methods, but they will not produce results very quickly unless they are backed by the law and its penalties. To invoke the law to catch a litter-thrower may perhaps seem like taking a steam hammer to crack a small nut. But some of the litter throwers are very hard nuts to crack, and not so small either. If it can be got to work, the legal steam hammer is certain in its operation. We need means, then, to operate it.

Some not very satisfactory means already exist. The Town Police Clauses Act, 1847, and the Public Health Amendments Act, 1907, contain some unused or unusable powers; and the Local Government Act, 1888, and the Borough Councils Act, 1882, *permit* County Councils and Borough Councils (only) to make by-laws on the question. Until very recently the by-laws acceptable to the Home Office under these Acts were to all intents and purposes useless, but now, through the representations of the Scapa Society, a more effective form has been sanctioned. A by-law may now be made that 'no person shall place or deposit or leave on or in (a) any highway or any roadside waste; (b) any common, village green, park, recreation ground, or other open space to which the public have access for the time being; or (c) any tidal or other water in or abutting on any such highway, roadside waste or other place aforementioned—any glass, china, earthenware, tin, carton, paper, or other refuse or litter so as to affect or tend to affect injuriously the public amenities of such place.' The difficulty with these by-laws, as it is with the advertisement by-laws, is that they are permissive. Only a very few local authorities have adopted them; and the few that have, rarely enforce them. They will never give any satisfactory results.

Obviously this question, like that of advertisements, is not a local one. Who ever knows the local by-laws, anyhow? It is unfair even to the wretched litter-thrower not to know when he may throw and when he may not. The question should be dealt with universally by the police authorities, as it is in many places abroad. In Vienna, where no less than 7,000 litter baskets have been provided in the streets, a policeman may inflict by his own authority a fine of 2s. on any one breaking the law as to littering the streets. In the first six months of operating this arrangement no less than 46,000 of these fines were inflicted. Since when the streets have been cleaner. Perhaps we need not go so far as to give authority to the individual policeman, but even that is better than giving no authority to any one, and licence to everybody.

A special difficulty exists for residents in country areas. Generally in the country there is no scavenging or collection of refuse by the

local authority. There should be. There are things a villager cannot burn or bury in his back garden: things like tins or bottles. Out they go, then, into the pond or brook, or behind the hedge, or on to the village refuse dump. Rural District Councils have a duty as Sanitary Authorities. They should be called upon to exercise it.

7. NOISE

Once the standard epithet for describing the country scene was 'quiet': quiet hills, quiet valleys, quiet villages, farms, roads, fields, and all the rest.

'In the highlands, in the country places,
... the essential silence cheers and blesses.'

But the essential silence is no more, or where it is, it will not be for long. The noise of mechanical power and mechanical music will soon dispel it.

The towns are probably no noisier than they ever were. Horse-shoes and iron-rimmed wheels on cobbled streets made, and still make in towns in Lancashire and elsewhere, a din far more shattering, even though it be more occasional, than the persistent loud hum of motor traffic. And though ordinary 'loud speakers' may be as raucous as were the now forbidden street cries of tradesmen, the noise they make is no greater. Towns ever have been loud with more than 'the still sad music of humanity'.

It is the ancient quietness of the country that suffers, and that will suffer still more. Small towns, villages, country lanes, mountain solitudes, are even now shattered with alien noise. The essential silence is already broken by the roar of motor traffic, by speed boats on rivers and lakes, by mechanical music from gramophone and portable radio, and by the personal music of exuberant 'hikers'. These may seem already to be in full blast. But they will be intensified. And the greatest disturber of the rural peace is but yet in its infancy. The aeroplane is the coming king of noise. Already he rules with autocratic fury in and around his nurseries, the aerodromes. To-morrow he will penetrate the remotest corners of the country.

The rest of the noise-generating agents are limited to certain defined places. The kingdom of the aeroplane is illimitable. One machine can deafen multitudes with its roar. When the air becomes thronged with them, as we are assured it will, life will become well-nigh intolerable. Then we may come to speak of the quiet town and the noisy country, for it is the country that will get the full fury of the horror. Aeroplanes will pass here, there, and everywhere on business

and pleasure. Then indeed it will be said with truth of the country dwellers:

The breezy call of incense-breathing morn,
The swallow twittering from the straw-built shed,
The cock's shrill clarion, or the echoing horn,
No more shall rouse them from their lowly bed.

The aeroplane will.

It is no comfort that the mechanism of flying is not yet fully developed. It is practically certain that the future will bring not less noise from each individual aeroplane, but still more. It is certain that there will be no flying without the roar of engines.

And there will be more than the mere noise of flying. We have already indicated some possible developments of advertising in the air. Here is another one, indicated in a leading advertising journal under the heading of 'Sky Talkies for England':

'Loud-speakers will be built into the fuselages of a fleet of five de Havilland Gipsy Moths. . . . The message is delivered by the announcer into a microphone and transmitted by a 260-watt amplifier which will make it plainly audible over an area of two or three miles from a height of 1,500 feet. Gramophone music will be interspersed between the advertisers' announcements. *The organisers have ascertained that there are no regulations which will prevent their project being carried out.*'¹

Regulations should immediately be made, then. The whole question of flying will have to be subject to strict regulation. It will probably be necessary to limit aeroplanes to certain well-defined routes: only in that way will there be any places left where privacy and peace may be enjoyed. How this can be done it is difficult to say, but even at the risk of hindering so-called progress there will have to be some prohibitions. Certainly all advertisement by noise, whether on the ground or in the air, will have to be rigidly prohibited.

Let there be no mistake about it, noise is a definite menace of the future.

8. GENERAL ORDER AND TIDINESS

These are but the more obvious of the things that go to make or mar common amenity. There is an almost infinite variety of smaller matters, apparently unimportant and negligible, that require attention: little things that jar singly and that are irritating and discomfiting in their cumulative effect; things upon which it is impossible and undesirable to legislate, that depend for their improvement wholly upon the good will and sense of orderliness of all classes of persons.

¹ From a letter to *The Times* cited in *England, Ugliness and Noise*, by Darby and Hamilton.

Only one such matter need be mentioned here, to give some idea of the type of thing that is meant. Every one is familiar with the way in which the pleasantness of many roads is spoiled by the road authority itself leaving its maintenance materials lying about for months at a time on the wayside grass: untidy heaps of stones and gravel at every few hundred yards, tar barrels scattered in ugly disarray, and the rest of the maintenance paraphernalia left where it fell when it was finished with.

If only people could be brought to realize that orderliness is the handmaiden of beauty, something might be done to bring beauty back again to places frequented by man.

PART TWO
THE TOWN

Tower'd cities please us then,
And the busy hum of men.—MILTON, *L' Allegro*.

A town is a tool.

Towns no longer fill this function. They are ineffectual; they use up our bodies, they thwart our souls.

The lack of order to be found everywhere in them offends us: their degradation wounds our self-esteem and humiliates our sense of dignity.

They are not worthy of the age; they are no longer worthy of us.

A city!

It is the grip of men upon Nature. It is a human operation directed against Nature, a human organism both for protection and work. It is a creation.

Poetry also is a human act—the harmonious relation between perceived images. . . . A town is a mighty image which stirs our minds. Why should not the town be, even to-day, a source of poetry?—LE CORBUSIER, *The City of To-morrow*.

All unnecessary vacuities to be placed out of the Town.—SIR CHRISTOPHER WREN, *Parentalia*.

The houses be of faire and gorgious building, and on the strete side they stande joyned together in a long rowe through the whole strete without any partition or seperation. . . . The houses be curioslye buylded after gorgious and gallant sort, with three storyes one over another. . . . The rooffes be plaine and flat.—SIR THOMAS MORE, *Utopia*.

CHAPTER VII

URBANITY OR RUSTICITY?

I. THE TOWN AS AN EXPRESSION OF CIVILIZATION

MAN first created towns that he might, through them, obtain the comforts of the society of his fellows, and the benefits of their co-operation in his struggle with the blind forces of Nature. When he built his first town he was definitely emerging from barbarism, was on the road to civilization. It is true to say that civilization began with the city. And it is as true that the city developed with civilization. So that as man becomes more and more civilized he builds his towns more and more in the image of his increasing or decreasing power and dignity, until eventually they become the outward measure of his civilization.

Our towns reflect something of the disorders of our time, even as the Victorian towns reflected the Victorian disorders of *laissez-faire*, and as the eighteenth-century towns reflected the dignified, elegant, urbane, and rational civilization that created them. To-day we neither scramble like the Victorians nor move with the urbane grace of the Georgians. We grope. We are torn and harassed and perplexed. We have no scheme or broad philosophy. There is no evident Spirit of the Age. Our towns are negative and colourless. As an expression of civilization they are worse probably than the Victorian towns. Those were brutal but definite: ours are—nothing. They suggest, if they suggest anything, a retrogression from civilization: a return, or a half return, to Nature: a dislike of society and co-operation. We abase ourselves before Nature, set her up and glorify her in the very place, in the town, that has been our defence against her and our power over her. This we do in a sort of religious ecstasy—and yet in another mood we ravish her in her own place, in the countryside, with the most callous brutality. We have neither pride nor dignity in our outward bearing: only shame and a false and shallow romanticism. The Georgians, who could see natural beauties as well as we, who indeed, not abasing themselves before them as we do, shaped them to greater beauty, a beauty with a human relationship—they built themselves habitations in their towns that were proud and elegant and splendidly isolated from Nature. Most of the rest of the world still does so. We play the peasant—almost the clown: we mentally don smock and corduroy: we have no dignity or urbanity to express; the congregations of country cottages that are our new towns express what we have in their stead. We despise society and glorify the individual. Some

measure of co-operation we must still keep, for we cannot help it while civilization and towns continue. But we will give only the minimum measure. We will live in a street in a 'town' because we must; but we demand the right to stand aloof from our neighbours in detachment and in the indulgence in our own personal eccentricities.

The analogy can be carried too far. If civilization were quite infallibly measurable through town-expression, our position would indeed be a miserable one. Perhaps civilization may be regarded as the inner vital organism of a body, and the town as the surface form of that body. If civilization is sick and disordered, the internal malaise will show an external surface expression. But that surface expression may exaggerate the general condition, and a mere passing disorder may seem through it to be some mortal disturbance. That is probably the case to-day. Nevertheless a surface rash is by no means to be neglected. It will generally show *some* internal malady, some lowering of the general vitality. And it may be dreadful to look on and to live with. It should be attended to. It is perhaps unlikely that attempts to cure the rash on the surface will ameliorate the general condition, though that is not impossible. But at any rate the rash itself may be healed.

2. HISTORICAL SKETCH OF ENGLISH TOWN-DEVELOPMENT

The present rash resulted from a false diagnosis of the Victorian complaint, and from the quack cure that was applied to it. The Victorian complaint had caused such a shocking debasement of the traditional features of the town that the quacks who took upon themselves the treatment and cure of it decided that the features themselves were inherently wrong. They were the features that the town had had since towns began. But they were all wrong, even when they were at their most perfect. They must be changed, or at any rate when a new town was born they must be suppressed. So for the last thirty years the English town has been undergoing the painful treatment required for a complete change of form—a sort of violent face-lifting. The treatment is now practically complete. Most of the recognizable features have already been blotted out; and they have not been replaced. And what was once a passably pleasant face now resembles nothing so much as a characterless and unfashioned lump.

Leaving these medical allusions, it will be as well to take a rapid glance at the history of English town-development.

The only form of town-development hitherto known throughout the civilized world has been that in which habitations have been closely grouped together. In the first instance this resulted from the desire for warmth and contact and from the necessity of keeping a town as



Regent Publishing Co.

28. COUNTRY TOWN, AMERSHAM



By permission of L. de Saisons, Esq.

29. TOWN-COUNTRY, WELWYN



(From 'Site planning in Practice' by courtesy of F. Langstreth Thompson, Esq.)

30. RATIONALISM, HATFIELD



L. de Soissons, Esq.

31. ROMANCE, WELWYN

small as possible so that its walls might be defended the more easily. But it did more than provide warmth, contact, security, and co-operation: it expressed them and became symbolic of them.

English towns right up to the Renaissance were similar to all other towns: perhaps they were not so closely packed, for the necessity for easy defence was not so apparent here; but in their streets they displayed the same characteristic crowding together of their buildings. Only after the Renaissance did they begin to show an individuality. It was the individuality of backwardness, however, not of progress; for though at the time of the great refashioning of the Continental cities under the Renaissance architects similar movements were discernible in England, they all came to naught. We might indeed have led the world had the conditions in England been similar to those on the Continent. There, there were powerful leaders and despots to carry forward great schemes despite the opposition of vested interests. Here there was democracy. And so the fine dignified city that should have arisen, through Wren's plans, from the ashes of London after the Great Fire, was defeated by the interests of shopkeepers. If Wren's London had been built the tale of the English cities and towns would have been very different. Inspired by this central example they would have taken on the urbane grace that we now associate only with Continental towns. Instead they have developed as we now see them; and we—we, the most highly urbanized people in the world—have invented the excusing lie that we have never cared for them. The truth is only that we have cared for vested interests more. For, despite the set-back of the new London, a number of isolated attempts at civic building were continually made right up to the eve of the industrial revolution. At Bath from 1729 onwards there were built new quarters that had as fine a grace and elegance and civic-consciousness as had any Continental creation. At Edinburgh in the last quarter of the same century an extensive new town was built that was splendidly urban and dignified. In 1813 Nash began the building of Regent Street and added a gracious street to the multitude of fine squares that were already existing or were springing to being. And all over the country the buildings of that period were designed out of as fine a feeling for urbanity as any that had flourished abroad. To-day they expose the lie of the Englishman's having always been a town-dwelling rustic. The urbanity was there. What it lacked was scope for expression in large schemes. There was no power to compel the over-riding of vested interests. What it missed was an example such as Wren's London might have given.

Right up to the industrial revolution, then, English town-development, though it was backward, was of the normal type, i.e. it was

composed of *urban* habitations in close formation. Thereafter began a break-away: one hardly discernible at first and showing but a slow progress through several generations, but one which paved the way

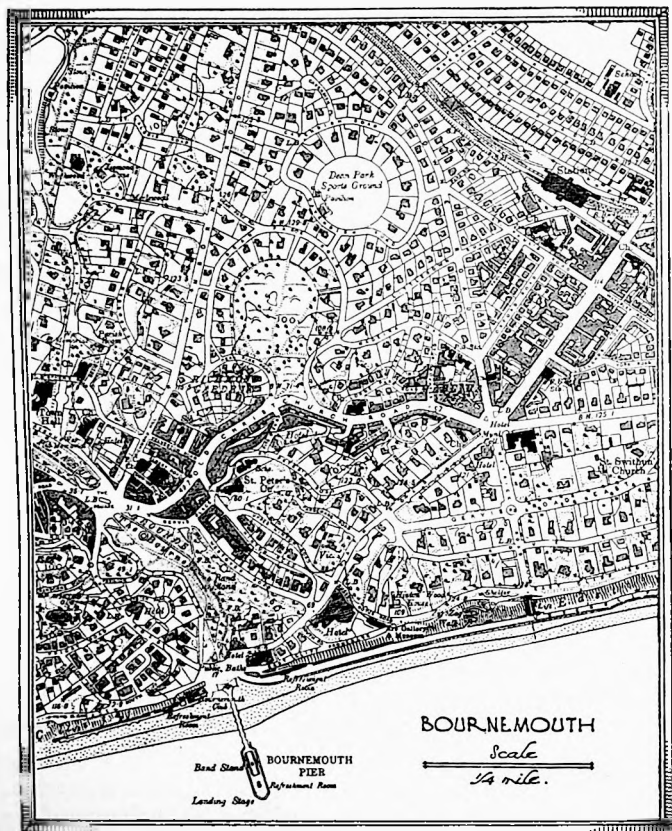


FIG. 19. Bournemouth, mid-nineteenth-century beginnings of 'open-development': from the Ordnance Survey Maps, by permission of the Controller of H.M. Stationery Office.

for the complete and emphatic revolution which was to come later to change altogether the appearance of English towns and ultimately to spread, to a lesser degree, to other parts of the world. It obviously arose out of that Romantic Revival which found its chief outlet in literature. Its first indications were apparent outside the town, in the antagonism against formality in the parks and gardens surrounding the large country mansions. It was only gradually that its

nature-worshipping tendencies began to break in upon the town itself. Where the wealthy had been content to live in large houses in streets and squares, they now began to favour detached villas surrounded by small 'landscaped' gardens. At first a very few large villas began to appear on the outskirts of the towns. Then one or two towns consisting wholly of villas were built; like Bournemouth, founded about 1850, and developed as a resort for the retired wealthy, with hardly a single street of continuous houses in all its sprawling area. And the break-away did not only consist of the abandonment of close building: it affected the layout of the towns. Where before buildings had fronted on to formal straight streets, squares, circuses, and well-defined crescents, they now faced, and from a considerable distance, on to wriggling and tortuous streets that reflected exactly the winding 'natural' paths of the landscape school of gardening. The straight road was definitely taboo: it was to be avoided at all costs. Everything was to be natural, picturesque, and romantic.

Here were the first beginnings of 'open-development' and 'garden-cities'. As yet, however, they were but few and exclusive. They represented but the smallest fraction of the town-building activities of the Victorian era. The rest of the town-building was being continued in the normal tradition. But it was most tragically debased. The close formation became shockingly close: so close sometimes that it was solid, as in the back-to-back houses. The normal form was being made abnormal by being carried to the grossest extreme. And the building was of the meanest character. The architectural standards of the whole period were deplorable, and the new town streets showed those standards at their lowest. Romanticists are ever ostrich-like. The small houses were not romantic. Ignore them, then: simply run them up as quickly as possible, and shut your eyes to them. Perhaps the concession of a front garden, 5 feet deep, might satisfy the nature-worshipping instincts that even the working-class had developed, though obviously they had no right to that type of romance.

So while an entirely new rival town-form was being slowly evolved, the debased character that the old form was now being worked in was preparing the way for a violent reaction against even the perfect expression of that form.

After some preliminary isolated indications, in Bournville (1879) and Port Sunlight (1887), as to the coming revolt against the traditional town-form of close formation, that revolt was given inspiration and a sudden overwhelming impetus by the publication in 1898 of a book called *To-morrow*, written by Ebenezer Howard, a social reformer. That book was in the full sense of the word an epoch-making work.

It probably exerted, over the whole world, a greater influence than any similar book has ever done—certainly a far greater influence than did Camillo Sitte's famous *Der Stadtebau* or than will the much-discussed frenzied theatricality that Le Corbusier has entitled *The City of Tomorrow*. It was the book that definitely shaped the movement that was destined in a few years to change the whole character of English town development.

3. HOWARD'S 'GARDEN CITIES OF TO-MORROW'

The men who had been responsible for designing and carrying through the great Renaissance and post-Renaissance schemes of town improvement were architects and artists; men who were concerned with the expression of beauty and grace through definite principles of composition applied to the materials in which they worked. The men who now undertook the creation of the new town-farms, Cadbury, Lever, and Howard, were purely and simply social reformers.

Nine-tenths of Howard's book was concerned with social problems. He was interested in all questions of social economics. He discussed with enthusiasm and penetration questions of wages and purchasing values, rents, towns revenues and expenditures, administrative difficulties, temperance reform, and similar subjects. His town-theories were but the incidental outcome of his consideration of these matters and were alone concerned with them. He had no interest in the town as a thing of beauty, a work of art, an expression of man's dignity and civilization.

His chief concern was the depopulation of the countryside. 'It is deeply to be deplored', he said, 'that the people should continue to stream into the already overcrowded cities and should thus further deplete the country districts.' He wanted to get the people 'back to the land'. He cited contemporary opinions to prove that in this one question alone were politicians and social reformers all in eager agreement. The towns were ugly, unhealthy, and altogether evil. We must get the people away from them. We must destroy them. That was his great concern. The town reformer showed his true intention at the very beginning of his work: he did not want to improve the town: he was out to destroy it.

But how to get the people away from the towns and back to the land? He recognized the attractions of the town.

'Whatever may have been the causes which have operated in the past, and are operating now, to draw people into the cities, those causes may all be summed up as "attractions"; and it is obvious, therefore, that no remedy can possibly be effective which will not present to the people, or at least to considerable portions

of them, greater "attractions" than our cities now possess, so that the force of the old "attractions" shall be overcome by the force of the new "attractions" which are to be created. Each city may be regarded as a magnet, each person as a needle: and, so viewed, it is seen that nothing short of the discovery of a method for constructing magnets of yet greater power than our cities possess can be effective for re-distributing the population in a spontaneous and healthy manner.'

'There are not only, as is so constantly assumed, two alternatives—town life and country—but a third alternative, in which all the advantages of the most energetic and active town life, with all the beauty and delight of the country, may be secured in perfect combination: and the certainty of being able to live this life will be the magnet which will produce the effect for which we are all striving—the spontaneous movement of all the people from our crowded cities to the bosom of our kindly mother earth, at once the source of life, of happiness, of wealth and of power. The town and country may, therefore, be regarded as two magnets, each striving to draw the people to itself—a rivalry which a new form of life, partaking of the nature of both, comes to take part in. This may be illustrated by a diagram of the "Three Magnets" in which the chief advantages of the Town and of the Country are set forth with their corresponding drawbacks, while the advantages of the Town-Country [*mark the ominous phrase!*] are seen to be free from the disadvantages of either.'

His Town magnet offers the advantages of high wages, opportunities for employment, tempting prospects of advancement, social opportunity, places of amusement, well-lit streets, palatial edifices; but these 'are largely counterbalanced' by high rents and prices, the closing out of Nature, the isolation of crowds, distance from work, excessive hours, fogs and droughts, costly drainage, foul air, murky sky, slums and—gin palaces!

'The Country magnet declares herself to be the source of all beauty and wealth: but the Town magnet mockingly reminds her that she is very dull for lack of society, and very sparing of her gifts for lack of capital. There are in the country beautiful vistas, lordly parks, violet-scented woods, fresh air, sounds of rippling water: but too often one sees those threatening words, "Trespassers will be prosecuted" . . .

'But neither the Town magnet nor the Country magnet represent the full plan and purpose of Nature. Human society and the beauty of Nature are meant to be enjoyed together. The two magnets must be made one. As man and woman by their varied gifts and faculties supplement each other, so should town and country. The town is the symbol of society . . . of broad, expanding sympathies, of science, art, culture, religion. And the country! The country is the symbol of God's love and care for man. All that we are, and all that we have comes from it. Our bodies are formed of it; to it they return. We are fed by it, clothed by it, and by it we are warmed and sheltered. On its bosom we rest. Its beauty is the inspiration of art, of music, of poetry. Its forces propel all the wheels of industry.

It is the source of all health, all wealth, all knowledge. But its fullness of joy and wisdom has not revealed itself to man. Nor can it ever, so long as this unholy, unnatural separation of society and Nature endures. Town and country *must be married*, and out of this joyous union will spring a new hope, a new life, a new civilization.'

All this is merely by way of introduction to his vision of 'Cities of To-morrow'. But before he settles down to his detailed considerations of rents, wages, prices, &c. and 'how excessive rainfall, the despair of the farmer, may be used to generate electric light and to propel machinery', he devotes a first chapter to a description of 'Town-Country', which he now calls 'Garden City'. His description is curiously thin. It is to be a place with about 30,000 inhabitants, covering 1,000 acres. The building lots are to be of an average size of 20 feet by 130 feet, or a density, allowing for minor roads, of about fourteen per acre—(mark the density!). 'Noticing the very varied architecture and design which the houses and groups of houses display . . . we learn that general observance of street line or harmonious departure from it are the chief points as to house-building over which the municipal authorities exercise control'—(a most exact prophecy of the eventual so-called town-planning control that largely resulted from the book)—'for, though proper sanitary arrangements are strictly enforced, the fullest measure of individual taste and preference is encouraged'—(Bang goes Civic Design!).

Here on this mist-encircled ground of Howard's romantic nature worship, on these shifting sands of political and sociological theory, are laid the foundations of 'Town-Country', the creation that is to displace the civilization-old town.

It will be as well to note, here, the muddled reasoning behind all this most persuasive eloquence, for as it began, so the town-country-garden-city idea developed in mental confusion made ever worse confounded.

The town is to be scrapped because Howard found there high rents and prices, excessive hours, fogs and droughts, foul air, murky sky, slums, and gin palaces. Was there ever such a mixture of sociology and civics? Gin palaces! That gives the key. How richly comic it is in its astounding irrelevance! As well abolish printing because the compositor who set up Howard's book was inordinately fond of raw onions for breakfast. But it is little more irrelevant than the rest. High rents and prices. Scrap the town because of them; the town which, in his own words, is 'the symbol of society, of broad expanding sympathies, of science, art, culture, religion'. And because nineteenth-century barbarians built slums and fouled the air with factory smoke, smash

this symbol of civilization. The rational person would demand the improvement or the abolition of these incidental non-inherent evils with which his contemporaries had debased the town. Not so the romanticist. Back to the land. Here is an excuse for it. Let us return to Nature whence we came.

Let us return to Nature through Town-Country. Was there ever a more prescient displacement of words? Not the country-town: the medium-sized town of the countryside, concerned with its trade, its social and cultural centre, accessible enough to Nature but yet still the traditional town, separate, urbane, and civilized. There were hundreds of country towns for Howard to see: many of them practically untouched by his slum-creating and mean-building contemporaries, most of them pleasant, some even lovely. But they would not do. They had risen above Nature. They were an impertinence. For our abasement before Nature and our worship of the country that is 'the symbol of God's love for man' we must create a new medium.

Town-Country, out of country by town, is to be that medium. As male and female, 'who by their varied gifts and faculties supplement one another,' town and country are to be married. Out of their 'joyous union' is to spring a new creation which will display, in one body, the organic characteristics of both. The glorification of the Hermaphrodite! For Howard does not remember that in marriage the separate married identities remain with their special distinguishing characteristics unaltered: they do not merge into one common form half-way between their two differing forms: nor do the fruits of their marriage display that new form half-way between theirs. He does not remember that the fruits of marriage have the biological form of one or the other of the partners: that they are male or female; and that so for ever are antitheses and fertility preserved. Howard's new hope, new life, new civilization, Town-Country, is a hermaphrodite; sterile, imbecile, a monster; abhorrent and loathsome to the Nature which he worships.

Yet upon such specious arguments and analogies were the New Jerusalems builded.

4. THE BEGINNINGS OF GARDEN-CITIES

The sensation that Howard's book caused and the results that sprang from it are well known. In 1901, three years after the publication of *To-morrow*, a company was formed to undertake the construction of the first garden city. By 1903 Town-Country was coming into being. As soon as the architects and surveyors got to work on actual details there was naturally some modification of Howard's original intentions.

The main theories were, however, maintained, and in this first experiment garden-city principles were established once and for all. The place was to be entirely different from the old town idea: the development was to be 'open' and countrified, it was to be leavened with all the natural features that could be crowded into it. So successfully were these things done that twenty-odd years later, when the place has acquired a population of over 10,000, the historian of the garden city movement, C. B. Purdom (in *The Building of Satellite Towns*), notes with satisfaction that 'the characteristic feature of Letchworth is the open lay-out of the roads and houses so that the whole town preserves some of the features of a park. All roads are planted with trees, with greenswards along all but the busiest roads and some of the narrower residential roads: and the hedges to the house plots, and the trees, shrubs and flowers in the gardens give the town a rural appearance at all times. . . . Nature aiding, even encouraging the efforts of man, has brought beauty to the town'.

So from Letchworth to the beginning of the War the story of town development is the story of universal adoption of garden-city ideals applied to garden-suburbs, garden-villages, garden-this-that-and-the-other. A Town Planning Act is passed to make conformation to these ideals compulsory, and when under it schemes are adopted for town extension, making it legal that 'not more than four dwelling-houses shall in any place be built under one continuous roof', even the *Town Planning Review*, the famous journal of a famous School of Civic Design (*sic*), notices the point with much satisfaction.

Since the War 'open development' has been sacrosanct. Hundreds of thousands of houses have been built by municipalities on the edges of their towns. These could only be built with Government approval, and for Government approval it was essential that the development be on 'garden-city lines'. £90,000,000 of public money has been spent on subsidizing private house-building—again on 'garden-city principles'. Town-planning has been made compulsory on all towns of over 20,000 inhabitants; and no town-planning scheme will be approved by the Government officials that does not insist on all the ideals of 'open-development'. It is by now quite impossible to build in any other way. If a modern Craig were to desire to build a modern New Edinburgh, he would not be allowed to do so (see p. 161). A triumph indeed for Howard and the builders of Letchworth.

For a new idea of this sort to have caught such a hold on the public and official imagination that it is enforced as a part of the law of the land, it must surely have an unassailable foundation in demonstrable scientific fact. Even if 'Town-Country' has been conveniently forgotten

as its origin, it must have developed, incidentally, some other and sounder basis. That basis is now supposed to be 'health and amenity'. We will examine it on these grounds.

5. ANALYSIS OF 'OPEN-DEVELOPMENT'

'Open-development' is achieved in practice by insistence on large house-gardens and the limitation of buildings to a maximum density of twelve houses per acre, by insistence on the detachment, semi-detachment, or at most demi-semi-detachment of the buildings, and by insistence on the buildings being set well back from the street behind deep building-lines. All these ingredients mixed in a proper proportion, and highly-seasoned by a lavish addition of grass, trees, and flowers, are to make that delectable, stimulating and health-giving mixture, 'the garden-city'. Let us analyse these ingredients.

Gardens attached to town houses were not unknown before Letchworth. Indeed they may be said to have been an essential accompaniment to all English houses until the middle of the nineteenth century. An inspection of old maps will amply prove this and will show that even in the supposedly piled-up area within the walls of a Tudor city there was an altogether surprising amount of land devoted to gardens and orchards. These certainly were not visible to him who passed between the continuously built-up façades of the streets, but nevertheless they were there. And they had an importance to town-dwellers which we can hardly recognize to-day, for they held an especial delight to people who had not yet acquired either a romantic interest in wild Nature, or public parks in which to disport themselves, or even a ready and efficient supply of fresh vegetables and fruit from the surrounding country. The great mid-eighteenth-century development schemes at Bath, Edinburgh, and elsewhere, and practically all unplanned and intermittent town development until the Victorian period, continued this provision of private gardens, always behind the continuous façade. So the social reformers who planned garden-cities were breaking no new ground here. They were returning after an interval of some fifty or sixty years to an already established principle. But they were returning to it with an entirely different set of ideals and with an entirely different intention.

Their provision of large gardens was an essential part of the movement for preventing rural depopulation, for getting the workers 'back to the land'. They arrived at their standard of a maximum building density of twelve houses per acre, by estimating that this was the smallest area upon which a man could grow sufficient vegetables, not only to supply the needs of himself and his family, but also *to sell and*

make a comfortable small profit which would supplement the wages he earned at his work. This was the confessed intention. The gardens were not primarily for health or amenity: they were a sort of small-holding to be worked for profit.

It was not long, however, before, in the flabby process of thought which has characterized the whole development of garden-city practice, this area, this standard of twelve houses to the acre, was regarded as the sole standard for reasons of health and amenity also. It is not demonstrable by any scientific means that such is the case, that a town with twelve houses per acre is healthy whereas a town with twenty is not. It could not at the time of Letchworth's building and it cannot to-day be shown that that density is the maximum density which will allow of the proper amount of sunlight, air circulation, and so on, that is hygienically necessary for healthy living. The garden-city builders, in fact, made no attempt to show that. They were content with specious arguments and with comparisons of incomparable statistics. By means entirely external to the question of health they had arrived at their density of twelve. The old towns showed large areas that were developed at a far higher rate. They also showed a death-rate that was twice as high as that of the new town. Therefore twelve houses per acre was the infallible maximum density for houses, and no new town should be built or old town extended with houses at a greater rate. In their comparisons of health statistics they made no allowances for the conditions which they reviled elsewhere; the gross overcrowding *in* the houses apart from that *of* the houses in the old towns; the lack of public open spaces and recreational facilities, the atmospheric pollution, the poverty and under-nourishment; all of which conditions were absent from their own little experimental town. Of course their town was healthier than the old towns: of course it had a lower death-rate than Liverpool where a quarter of the population was living under indescribably insanitary conditions. But it is one of the curiosities of modern social history that this fact should, for thirty years, have established the artificially determined density of twelve houses per acre in a condition almost of sacrosanctity.¹

¹ The comparative zoning for housing is shown in the following table of the preliminary Town Planning Schemes approved by the Ministry of Health for the year April 1930-March 1931.

Average number of houses per acre.						
2, 3, & 4	6	8	9 & 10	12	15 & 16	20
1.58%	4.17%	14.51%	2.30%	75.43%	1.87%	0.14%

N.B.—98 per cent. of the total housing land is zoned at 12 houses per acre or less.

The justification for an open area, whether used for gardens or not, at the backs of houses, lies in the benefit to health which it provides through ventilation, the free circulation of air, and the penetration of sunlight. By-laws have long governed buildings so as to secure the first two conditions. They can be obtained by a comparatively small space, by the ordinary paved 'back-yard' of houses developed even at forty to the acre, in fact. The scientific ascertainment of the amount of space necessary for the penetration of direct sunlight, however, has been strangely neglected, even by the garden-city reformers themselves.

Perhaps the most valuable contribution that has so far been made to this subject of the incidence of sunlight in streets is contained in the course of two articles contributed to the *Town Planning Review* (viii. 2; ix. 1) by Mr. A. Trystan Edwards. Mr. Edwards, by the use of graphs, clearly demonstrates that instead of demanding a minimum width of seventy feet (the garden-city standard), or any other fixed dimension, between all houses on all roads, the scientific way of regulating width is according to the orientation of each road and the height of the buildings fronting it. He also shows that it is far more reasonable to base regulations on the solar conditions that prevail during the greater part of the year (from the beginning of March to the end of October) than on the theoretic conditions of midwinter, the worst part of the year, when the possible amount of sunshine obtainable anywhere is quite negligible, being on the average actually only ten per cent. of the theoretic maximum, or only three-quarters of an hour for the whole day. His diagrams show, as is to be expected, that the sunlight obtainable does not increase continually with an increase in distance between buildings (which would seem to be the garden-city theory), but that there are critical widths where an unlimited increase would give practically no extra sunlight but where even a small decrease might shut it out altogether. Thus, a street running east and west and composed of houses 18 feet high would have eleven hours possible sunlight at midsummer *if it were only 10 feet wide*, and would have the same amount at the equinox *if it were only 24 feet wide*, but in the latter case if the width were reduced by only 4 feet, to 20 feet, it would have only one hour of sunshine, ten hours being immediately lost by that small reduction in width.

This last instance shows that it is possible at one orientation for average small houses to enjoy a theoretical daily amount of eleven hours of sunshine during the seven or eight best months of the year—at a density of forty-five houses per acre. Other instances could be given of orientations where densities of twenty and thirty and more

houses to the acre would allow all the penetration of sunlight that could reasonably be desired. Even 'open development's' own universal standard of a distance of 70 feet between house building-lines would allow of a density of twenty-four houses per acre. Yet, on all these orientations, garden-city and town-planning regulations would permit only a maximum density of twelve.

It should not be taken from this that the question of planning for sunlight is simple and that it is easy to lay down hard and fast rules concerning it. It is extremely involved (far too involved to be pursued any farther here) and it depends on the definition of what is the reasonable standard of sunlight to be aimed at; for if every house is to be built so that every room is to be a sun-bath, catching every single minute of sunshine from year end to year end, then architecture and towns become impossible and the home ends as a box of glass on a hill-top. But this glance we have taken at Mr. Edwards' investigations does show that on this point of sunlight incidence, as in everything else, garden-city theories are flabby and unscientific.

On the grounds of health alone, then, this garden-city standard of housing density is excessive.

In its original intention of providing a type of miniature small-holding for every town house it is absurd. In these days of an unlimited supply of fresh vegetables, what number of town-dwellers wish to raise even sufficient vegetables for their own consumption, let alone sufficient to make a small income as well, even if, as is doubtful, they could find a market for their produce? A very small number may. But as to the vast number that do not, a walk through almost any municipal housing scheme will prove instructive. There one sees garden after garden partially or entirely uncultivated, growing, instead of vegetables for profit, weeds and rank grass. Or at most one sees merely a continuous struggle to keep down the weeds for tidiness sake. Corporations have been reduced to the expedient of prosecuting tenants for not cultivating their property. So that not only is a person to be forced to have a large garden, he is to be forced to cultivate it. But, even so, prosecution is necessary on such a large scale that even that is being discontinued with a governmental shrugging of shoulders and a murmur about ingratitude.

It is, on the face of it, grotesque that modern towns should be dominated by a 'back-to-the-land' movement of thirty years ago and that a modern town-dweller should not be allowed to build or obtain a house unless it has a miniature small-holding attached to it. There are, incredible as it may seem to social reformers, persons who do not want gardens attached to their houses—there are, as a curious example,

the Northumberland miners who leave their house gardens in a state of shocking neglect yet cultivate an allotment, or even two, some distance away. There are also innumerable people who, if they want a garden at all, want only a small one, where they can have a patch of grass and grow a few flowers: the type of garden that would accompany an ordinary house at a building density of 20 or 25 to the acre. All these people should be allowed to have exactly what they want. So long as the minimum conditions that are required for public *health* are observed, no one has any right to say what is the minimum of garden that should be attached to a house.

On this matter, as on some others, the garden-city ideals are against the public interest. It is not only that the enforcement of this arbitrary amount of garden land is grossly unfair on the individual members of the general public. A more important matter is its effect on the town (and consequently upon the countryside). Hundreds of thousands of houses have been built to this standard, and scores of thousands more to an enforced density that is still lower—ten, eight, six, four, or even two to the acre. The result is already obvious. The new suburbs and town extensions sprawl out in a sloppy diffuseness all over the countryside. London begins to roll over the Home Counties: Birmingham, Manchester, Glasgow, and all the big and little towns in the kindgom spread and sprawl proportionately. If this standard is to be continued, it is difficult to imagine what the next fifty years will bring. If the present London alone were rehoused uniformly at this maximum density of twelve houses per acre, it would, with its necessary shops, factories and open spaces on existing town-planning standards, expand to three or four times its present size. And so with all towns. The country will be pushed farther and farther away, transit from suburb to centre will become a question of more money and still longer time, and the cost of all social services will be continually increased. And all because of a small-holdings idea which has no relation to town life!

Surely the ideal town is one which is as compact as the minimum requirements of public health will allow.

But though low housing densities must certainly bring an undesirable diffuseness to the town, they need not inevitably result in a loss of urbanity and town character. Large gardens may be hidden behind continuous façades. Yet unsatisfied by diffuseness, the garden-city ideal insists on the ruin of urbanity also.

A manifesto of 1902, propagating the garden-city gospel and encouraging the formation of the company to promote its ideals into actual facts, states that 'each house will stand in its own garden'.

It will not merely *have* a garden; it will stand in it, as a mansion stands in a park. And then a little later, when garden-city is on the eve of becoming an established fact, a published pamphlet containing 'General Suggestions and Instructions regarding buildings on the Garden-City Estate' states that 'ample frontage will be provided and it is hoped that builders will not think of erecting those common unsatisfactory rows of narrow houses'. So Letchworth was built of detached or semi-detached houses: so garden-suburbs and garden-villages, legitimate and illegitimate, were built: so hundreds of thousands of municipal and subsidy houses sprang up in semi-detachment; till now it has become as rare to see a new *street* of houses as it is to find a wire-less wireless set. So to-day, town-planning schemes, which become the local law of the land, contain clauses which require that 'not more than four dwelling-houses shall in any place be built under one continuous roof'; which, however, is an unnecessary restriction on the speculating builder; for, having studied the taste of his clients, the general public, he resolutely declines to build anything other than what he affectionately designates as 'semis', for the simple reason that he would find it almost impossible to sell them. So have the ideals of yesterday become the commonplaces of to-day. And what commonplaces they are!

As house gardens were known before the garden-city movement, so were detached or semi-detached town houses. The disservice that the garden-city movement did to the world was to proclaim that they are desirable above all other houses. Streets or terraces of houses are common, monotonous, repressive of individuality, symbolic of slavery and uniformity, unworthy of civilized man. The Englishman's home is his castle. Castles stand apart: one cannot have a street of them. How can one deceive oneself into the belief that one is living in the country, except by detachment? (Though, as we have seen, even villages are of continuous buildings.) Besides, detachment permits of greenery, and greenery savours of the country. Streets must be taboo; and so that there will be no mistake about it, the very word is no longer to be used, even for the purpose of an address: *Way* (*Meadow Way, Valley Way, Broad Way, &c.*), *Avenue, Gardens, Grove, Drive, Green, Ridge, Hill, Dale, Lane*, all have the proper country flavour; *Road* is occasionally admissible; *Street* must never on any account be used in garden-city.

Yet as any one can see on any modern housing estate this detachment is quite disastrous to the very amenity it attempts to achieve. Leaving aside for the moment the question of urbanity, let us examine the effects of detachment on ordinary common amenities.

We will take Welwyn, admittedly the highest achievement of garden-city practice, as an example.

Here the semi-detached houses on either side of the ordinary road are *sometimes* sited exactly facing one another and the gaps between the houses are *sometimes* closed by curtain-walls so that a sense of enclosure is *occasionally* preserved. But look at the plans of culs-de-

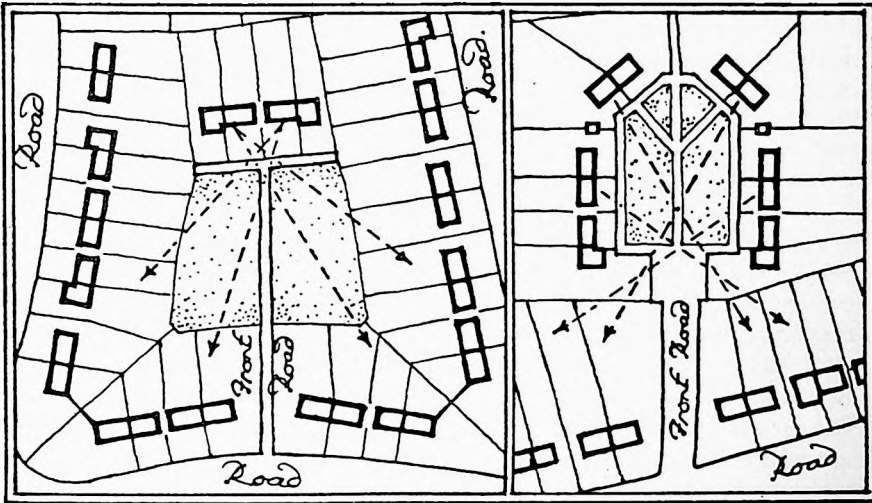


FIG. 20. Open development: Welwyn. The arrows indicate some of the views of back premises from front windows.

sac shown on Fig. 20. What does the traveller down these garden-city streets see? Walking down what is obviously intended as a front approach and not as back passage, he continually finds the backs and sides of houses exposed to his view, he finds himself willy-nilly intruding upon the privacy of back gardens where domestic operations are being performed, and in general he is made to experience the sensations of one who has been directed to the tradesman's entrance with all its untidiness and its derogatory familiarity. And what does the householder see, sitting in formal state in the front drawing-room of one of the houses at the top of the cul-de-sac? From his *front* windows, over his front garden, he looks across some one else's *back* garden to some one else's *back* premises. Is this amenity? Is it even common decency?

That is open development in its highest practice. In the innumerable examples that fall far short of the standard of Welwyn, the effect is altogether deplorable. There very little effort is made to site the

detached units opposite each other, the curtain walls that should link the houses together are omitted, and even the trees and bushes that should provide the rustic touch and that should close the gaps for at least a part of the year are missing. They were shown on the plan of the estate—(and oh! how easy it is to make a lay-out of open development look exciting and lovely on *paper*, and how difficult it is, even with the brightest colours and all the most expert tricks of draughtsmanship, to make a plan of simple continuous streets in any way so picturesque or attractive!)—the trees and bushes were shown on the drawing, but somehow or other they seem never to have got into the ground. And so in nineteen out of every twenty housing estates, whether one looks from a window or merely passes along a street, one's eyes are everywhere shocked by the views through yawning gaps between the houses—by the indecency of back elevations, by bare and untidy gardens divided by post and wire fences in various stages of dilapidation instead of by hedges and trees, by spasmodic jumbles of irregular out-buildings, by the intimacy of underclothes on washing lines, and by all the forms of indecent exposure habitually practised by garden-city developers.

So much for the natural amenity of open development.

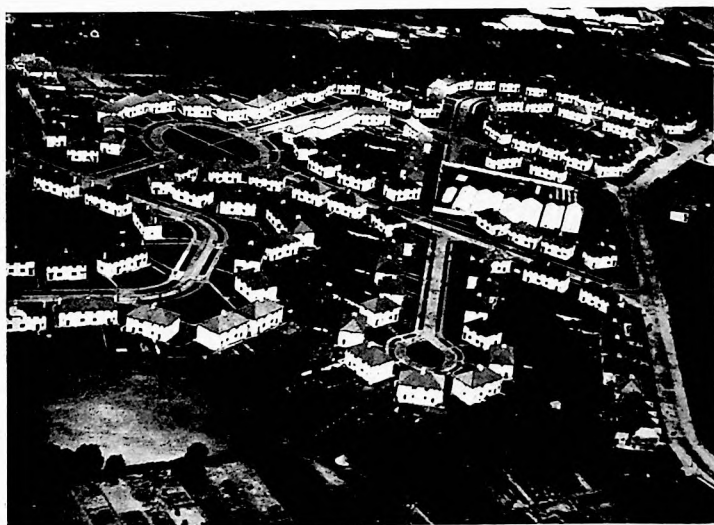
As for architectural amenity, it is obviously improbable that it will exist where 'the fullest measure of individual taste and preference is encouraged', and where each building isolates itself and indulges in its personal idiosyncrasies without any regard for any other building in its neighbourhood, or where at most it is willing to enter into some understanding with and be united to only one or two other buildings. Buildings in a street *must* be judged as mere units in the architectural composition of the whole street, or at least of such part of the street as is visible at one time to a person passing along it. Obviously then the buildings have got to be judged not only in relation to one another but in relation to the spaces between them, for as there is an interplay between the solids and voids of the walls and the windows of the buildings themselves, there is an interplay between the solids and voids of the buildings and the spaces between them. This does not apply to houses set so far apart that the eye cannot properly value the distance to gather the scene up into a single picture. But it does apply in a street of medium-sized houses such as a garden-city street—and if a harmony exists between houses and spaces in such a street it is nothing short of a miracle of good luck.

What obsessed these housing reformers into the adoption of universal semi-detachment was the fear of monotony. And what they have produced out of that fear is a monotony more dreadful than



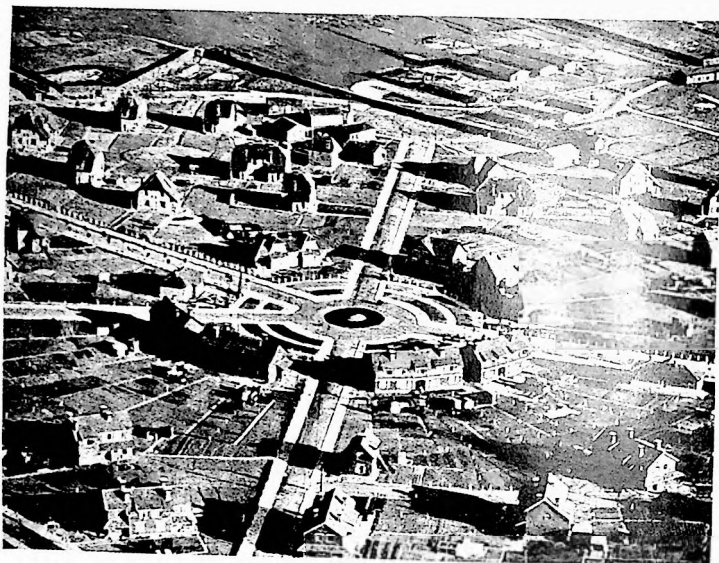
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32. PEACEHAVEN



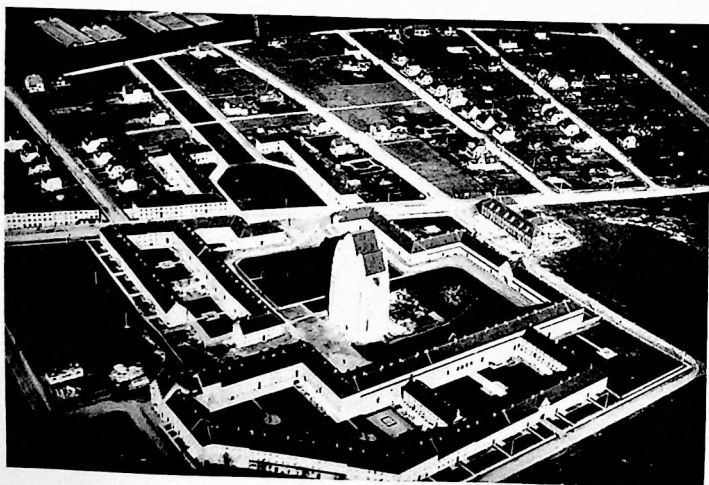
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33. ANYWHERE IN ENGLAND



34. CITÉ-JARDIN: VALENCIENNES

L'Illustration



35. COHERENCE AND INCOHERENCE: COPENHAGEN

Flyverkorpsset, Copenhagen

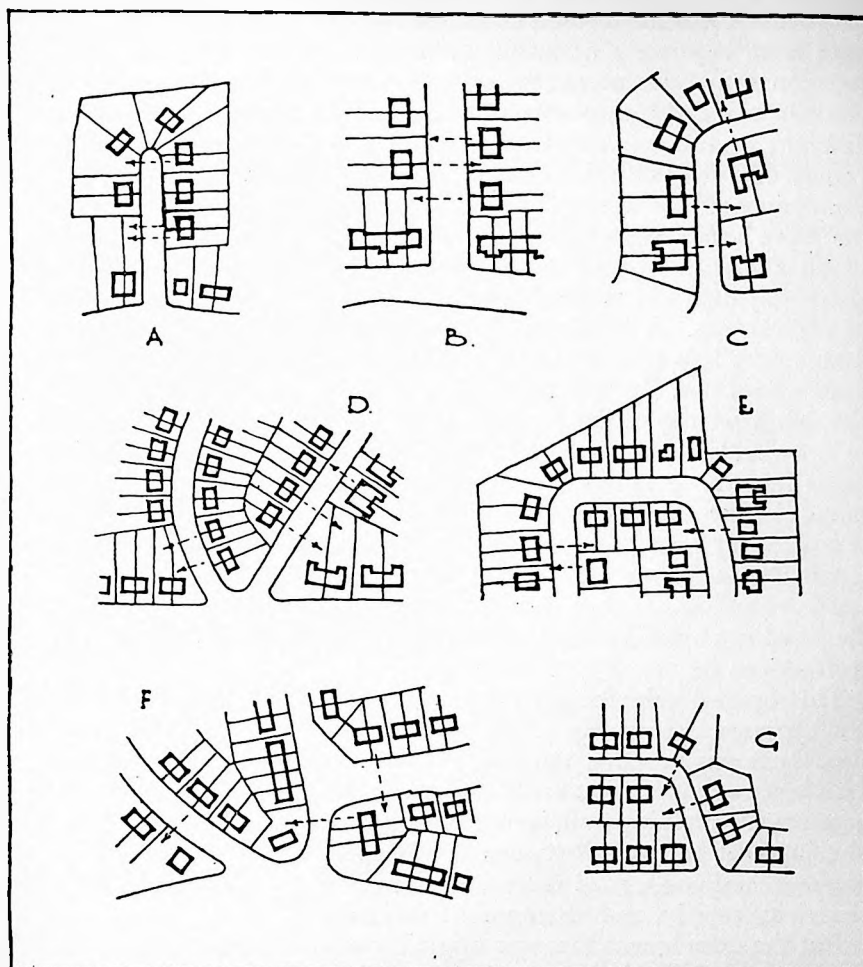


FIG. 21. The Gap in open-development: 7 random illustrations from one town. A, B, and C are from one of the earliest pre-war Garden-Suburbs: D and E are from post-war subsidy housing estates: F and G from municipal housing estates. The arrows show some of the views of back premises and back gardens from front windows.

anything that has gone before, and more fearful in its implications. If the Victorian terraces are like barracks inhabited by the well-drilled cyphers of a colossal machine (the standard simile), our modern streets of semi-detached houses are like the habitations of diseased bodies and sick souls that must live and die in isolation.

There are other ways in which detachment is ruinous of amenity.

It is almost bound to result in conflict between various units which have been separately designed. Thus one gets a continual jarring between the different angles of gables, between gables and hips, between the different planes of end walls on corner plots, between different styles and different materials, between a multitudinous variety of widely differing details. And it encourages, too, the worst expressions of the desire for variety. Thus even in detached units that have been designed in relation to one another it is quite common to get a scheme of roofs that are alternately hipped and gabled, or alternately tiled and covered with slates. This of course is not inherent in detachment. It is simply the crudest form of bad design. But detachment lays itself open to it; whereas a street-long roof of one design does not. It lays itself open, also, to that sickening and too obvious hypocrisy of the front of a house being of different materials to two visible sides; again, of course, not an inherent fault. These faults have been but sketchily indicated, and there are others that cannot be enumerated here, because they belong to the wide subject of architectural composition which is outside the scope of our present consideration. But it must be obvious to every one that in a street of small or medium-size houses no architectural amenity can exist unless the buildings form continuous blocks to which the principles of composition can be broadly applied.

This open-development by detached or semi-detached blocks or small groups is seriously objectionable on the grounds of economy also. It is obvious that the houses themselves must be more costly than houses in a continuous block, where only one gable wall, which becomes the dividing wall, is necessary for every house. It is similarly obvious that the gaps between the houses are 'dead' areas which increase land costs, road costs, and the costs of sewerage, water and electricity supply, and other public services.

But the detachment that was originally advocated for amenity now seeks some justification in practical necessity, and the gap that originally provided rusticity now generally provides a site for a garage. This provision of garages is the sole obstacle to the return to continuous buildings in streets. Already in England there is an average of one motor vehicle to every thirty persons, which probably means that somewhere about one in every 15 or 20 families possesses a car, and we have got to consider the possibility of our eventually coming to a much more general distribution such as exists in America where the average is probably one car to about every two or three families. The number of families owning cars on an estate of small houses, like a municipal housing scheme, will perhaps never be very

great, and there the requirements may be met by the provision of an occasional group of lock-up garages. But it is pretty certain that eventually most medium-size houses will require a garage. If the continuity of building, which we so much desire, is to be achieved,

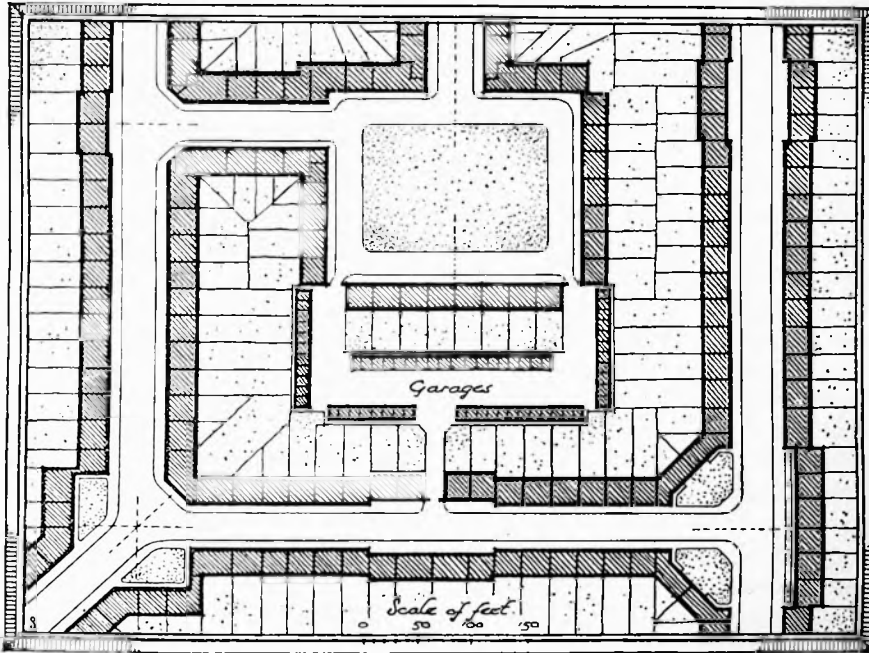


FIG. 22. Sketch for an area of continuous and close development with moderate-size houses showing garages (60) placed behind the building blocks. The house gardens are of various sizes to suit various individual requirements, and the gross density of the whole (including roads, greens, garages, &c.) is 16 houses per acre, though it might reasonably be much more.

then, some method of siting the garages other than the present one is necessary. Something could be done towards maintaining continuity by incorporating the garages in the house blocks, providing bedrooms above them—but probably without much architectural success. Perhaps the best method lies in the grouping of the garages along a passage behind the houses as shown on Fig. 22. Such an arrangement would probably be an economic proposition in the saving on road charges and the cost of constructing a front drive to every house, or at any rate the cost of the construction of the back passage would be no greater than these savings. It would certainly obviate the danger that arises from the numerous crossings of footways and junctions of

private carriage-drives with the public highway, particularly since the entrances to and exits from the grouped garages could generally be arranged on subsidiary rather than on main roads. This is one method. There are no doubt others. So the provision of garages cannot be regarded as an insurmountable obstacle to civilized streets.

The third method by which open development is achieved is the setting back of buildings from the edge of the street behind a deep 'building-line'. This again was no new device originating in the garden-city movement. It had been used before, though by no means universally, for large houses, and occasionally in continuous streets of small houses. And it will quite properly be used again in connexion with houses on busy traffic roads. But 'garden-city' practice was responsible for its attaining its present position of sacrosanctity. In modern development practice the 'building-line' idea is of all things fixed immovably. There is not one chance in a million that one would nowadays be allowed to build right up to the boundary line of even the widest and newest street. Every town-planning scheme fixes building lines 10, 20, 30, 40, and 50 feet back from the road.

Why? For amenity, it will be answered again, and for health, and perhaps for making easy any future road widenings.

The last two of these intentions are easy to dispose of and to prove misdirected. As we have seen, the incidence of sunlight in streets in England requires as little as 24 feet, on some orientations, between rows of ordinary two-story houses, for the enjoyment of a full measure of the available *direct* sunlight in the rooms of the houses. This naturally applies to the distance between the fronts of buildings as well as between the backs. So two-story houses set right up to the edge of an east-west street 24 feet wide may enjoy almost the maximum of sunlight, and building-lines requiring a greater width than this of 24 feet between such houses serve no purpose as regards public health and hygiene. And as regards their purpose of making easy any possible future road widening they are similarly unnecessary. One of the chief functions of a town-planning scheme is to plan ahead of development, for future needs. To depend on the future acquisition of private property for the success of a road plan is to confess the failure of town-planning in its central purpose. But in fact no such confession is called for or implied. In any case it would not cover the enforcement of building-lines in by-streets and culs-de-sac, and this suggestion that it is to facilitate future road widenings is not made in good faith, but is a transparent excuse for its continued use where it is no longer necessary.

As for their intention of securing amenity, the building set-back

and the front-garden are in harmony with the other garden-city ideals: they create some little rural effect and destroy a great deal of urban character. What real use are these little front-gardens? Pocket-handkerchief affairs that they are, they are far too small to walk in, too public to sit in. Each householder may get a little pale pleasure in proprietorship as he looks occasionally on to his patch from his front windows; but the public passing down his road gets none, for, because of the contempt in which lamppost-loving dogs hold these front

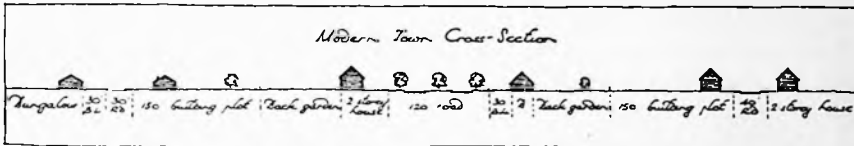


FIG. 23. Though this might be mistaken for a cross-section of allotment-gardens, it is of a typical modern 'town', developed at 12 houses per acre.

garden patches, each patch has to be surrounded with a wall and a hedge that would be sufficient to protect a manorial park. Yet, though they fail in providing rusticity, these gardens, like all the other trivial garden-city features, now find a practical justification. They ensure privacy. If there were no protecting gardens people might look in at front windows! And that would be an impossible state of affairs.

Of all garden-city ideals this of the deep building-line is one of the most dangerous. Since it has come to be universally applied our towns have lost all scale and dignity. It would have been disastrous enough to scale even if our urban building had continued on the standards of the civilized past, when rooms were high and houses were built to three or four stories. Coming as it did simultaneously with a retrogression to country cottage architecture and with the advent of the bungalow, its effect on our towns has been nothing short of ruinous.

What dignity or scale can houses that are 18 or 20 feet high have when they are set 80, 100, 150 feet or more apart? The principle on which garden-city developers and town-planners work is a minimum width of 70 feet between the fronts of buildings even in the by-streets and the little culs-de-sac. But even on streets 150 feet wide they will insist on building lines 25 feet deep, making the distance between buildings 200 feet. In deciding these questions they reiterate only the endless parrot-cry of 'amenity'. Not one moment's real thought is ever given to the question of scale, or even to the elementary question of necessity. When a street is planned, the only thought given is on these lines:—here is a street; it will probably be a street of such and

such a traffic importance; it will require so much space for traffic; we will increase that to a nice round figure; then we will give it additional width for 'amenity', for trees and grass—shall we say, 10, or 20 or 50 feet extra?—we'll make it 40 feet extra for luck;—then what about building lines? Shall we say, 5, 10, 20, or 30 feet of garden beyond the street line?—make it 25 feet! So the street is 'designed' and it is a matter only of the wildest caprice whether the distance between buildings is 70 feet, 100 feet, 150 feet, or 200 feet. Never a moment's consideration of the only thing of any importance after the basic traffic and health requirements have been allowed for. All questions of relative scales are completely ignored. Witless, sickeningly flabby maunderings about 'natural amenity': that is what our modern streets are built on.

Is it any wonder that our new towns look like deserts? Man may still be 'the beauty of the world, the paragon of animals, how like an angel! how like a god!' as Hamlet apostrophized him. But he is content now for his dwelling-places to look like the habitations of pigmies.

'Man is greater than his habitation', a modern architect-philosopher has said. He had need be if these insignificant places are his habitations. Look at the photographs of Welwyn facing pp. 136, 137. This is a model of what is to replace our towns. These insignificant country cottages set on either side of a great space are the worthiest habitations of twentieth-century Man!

Perhaps some day 'amenity' will come to mean the antithesis of 'beauty'. It will be the founders of garden-cities and town-planners who will have made it so. Already it is notorious that 'amenity' and 'urbanity' are incompatibles that have been divorced with the whole body of the town-planning profession cited as co-respondents.

No wonder that there is already a vague feeling of dissatisfaction gathering against 'open development'. No wonder that even so long ago as 1924 a high official of the Ministry of Health itself was led to protest. 'I confess', he said, 'that at times I become a little weary of the constant harping on so-called "development on garden-city lines": it is a green cloak for so much ignorance and flabby thought. I am almost persuaded that one of the dangers that confront town-planning at the present time is this loose talk of "garden-city development".'

6. REDUCTIO AD ABSURDUM = EXTENSION TO ABSURDITY

The *reductio ad absurdum* of the garden-city is its extension to absurdity, and of this, unfortunately, innumerable examples exist.

The worst in England is Peacehaven, which has rightly become a national laughing-stock. Garden-city enthusiasts disown any

connexion with the place, and are as willing to jibe at it as anybody else. It is indeed a disgusting blot on the landscape. Yet it is a pure example of Town-Country. Its faults arise only out of a too simple acceptance

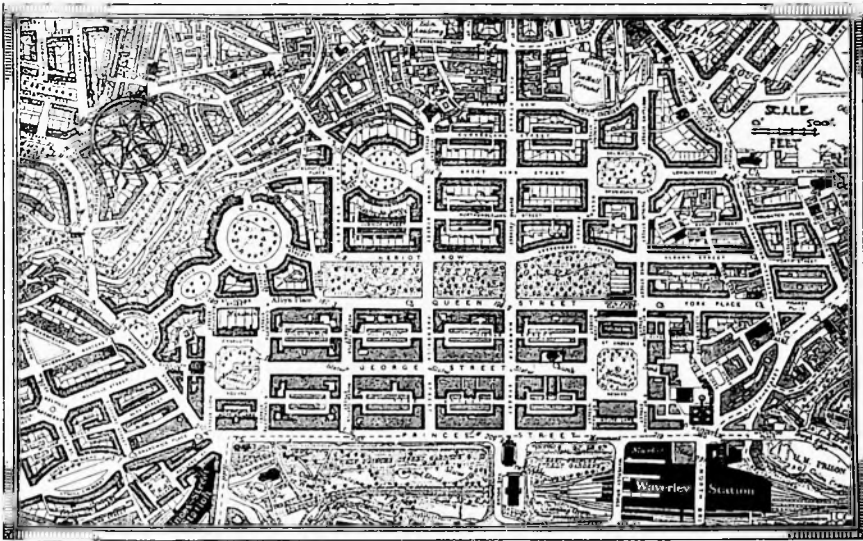


FIG. 24. New Town, Edinburgh. The streets laid out by Craig, Sibbald, and Reid in the late 18th and early 19th centuries are edged black. Adapted from the Ordnance Survey Maps, by permission of the Controller of H.M. Stationery Office.

of garden-city and open-development theories. Howard and the rest of the town reformers condemned and destroyed the old-town form because of its debasement in certain examples. And now Peacehaven arises to pay them back in their own coin.

And as the historically parallel movement of romanticism in 'naturalistic' garden and landscape design found its most ludicrous and disastrous expression in the *jardin-anglais* in France (the home of logic and urbanity), so does this romantic town-country open-development movement find its most lamentable expression in the *cité-jardin*. It is truly pitiable to look on the modern garden-city suburbs of Paris. They are incomparably bad. They far out-Wembley Wembley: they almost out-Peacehaven Peacehaven. And there, seen in so close juxtaposition to the most civilized, most urbane example of city building achieved by modern man, they do indeed make one wonder whether after all European civilization is sinking into a sort of senile decay, returning in its dotage to the intellectual standards of its infancy. This is romance with a vengeance. It is barbarism.

Do garden-city practitioners ever go to Paris, or any Continental city, to see the results of their influence? And are they proud of it?

They are evidently proud of their achievement here at home. One

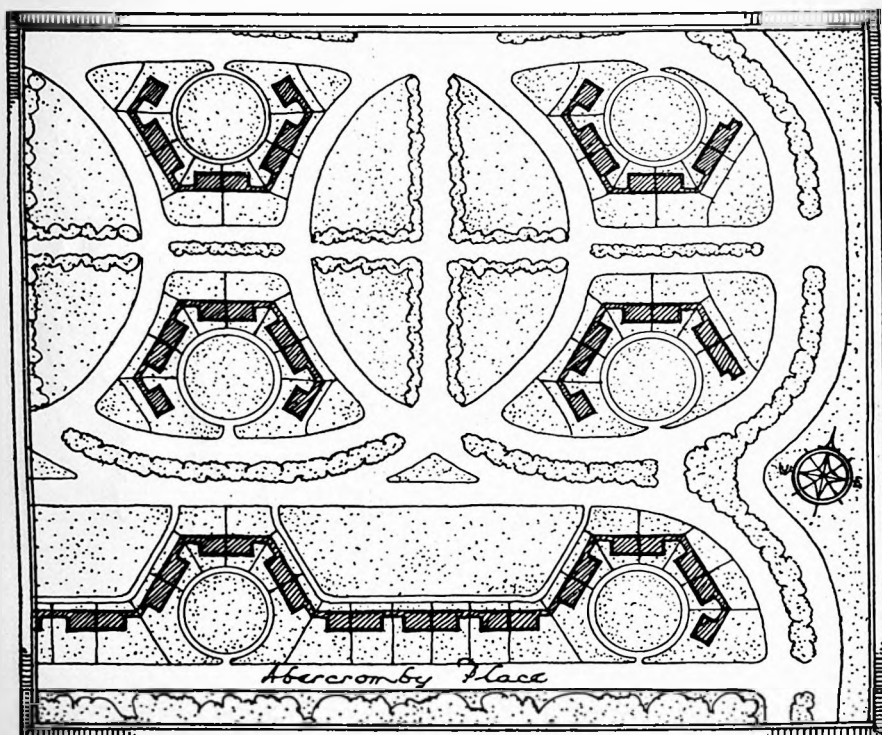


FIG. 25. The modern town-planner's idea of how Edinburgh New Town should have been laid out. From a diagram in *The Journal of the Town Planning Institute*.

instance will be sufficient to show their insufferable smugness. Two or three years ago the Town-Planning Institute held its annual meeting at Edinburgh. That city, containing as it does one of the finest examples of large-scale civic design in the British Isles, was a most appropriate meeting-place for such a society. Yet, in that place, one of the most eminent garden-city practitioners in the country, a past-president of the Institute, chose to deliver a lecture on how Edinburgh New Town should have been planned. Edinburgh, he said, afforded an opportunity for an interesting comparison between the ways in which a planning problem presented itself to eighteenth-century and twentieth-century town-planners. Craig, Sibbald, Reid, and Robert



36. A SQUARE, KENNINGTON



37. A COURT, KENNINGTON



38. A BLOCK OF HOUSES: LIVERPOOL

Adam set out to design a dignified city of urbane and beautiful streets. All wrong! Idiotically, foolishly wrong! Edinburgh New Town should have been designed so that every house had a view over the Firth of Forth, a silver streak two miles away: that should have been the only consideration. So the eminent garden-city planner produced *his* plan for Edinburgh (illustrated in Fig. 25) which afforded 'to a very large number of houses full command of the fine view over the Firth and to all the houses at least some glimpse of this view and to all their inmates the consciousness of living in the presence of it.' His plan affords much more than that! But restrained comment is difficult—and, after all, it is unnecessary, for the plan most assuredly speaks for itself.

7. URBANITY

Garden-city development, then, since it is not, as we have seen, in any way hygienically superior to properly safeguarded close-development, depends solely for its justification on the pleasure it affords urban people through contact with natural beauties. Howard's compelling impulse, when he imagined Town-Country, was to get people into a closer contact with the countryside: a most laudable intention, though he misapplied it. That impulse came to him at a time when the countryside was practically inaccessible to the townsman. It came to him in 1898 before the advent of the motor-car. His first garden-city was begun when motor-cars were as uncommon as aeroplanes are to-day. The various imitations of his new town, the garden-suburbs, garden-villages and the rest, were begun under similar conditions. His whole idea, in other words, is a thing of a past era, based on the conditions of that era. Those conditions no longer apply. To-day the motor-car, the motor-cycle, the motor-bus have made the countryside a thousand times more accessible to the townsman than it was when Howard, the social reformer, planned his reforms. To-morrow it will be still more accessible. Improved roads, new footpaths, hikers' trails, country reserves will have opened it up until it is the veritable garden of the town. Already then, Howard's reforms are out of date: his garden-cities, so far as they are intended to bring men into the countryside, are anachronisms.

Surely, at this time, of all times, when the countryside is at the doorstep of the town, man should be concentrating his efforts on the creation of a place worthy of himself, reflecting his dignity, his power, his subjugation of Nature, aiding and increasing his co-operation, his social contacts, his culture, symbolizing his civilization. For good or ill we are an urban people: probably the most urban in the world.

We have open at our doors a countryside of a unique loveliness. Surely, then, it is our business to maintain the beauty that is in the countryside and to create a new and a different beauty in towns that will be worthy of us. And it is surely a simple business. There are two definite, dramatically different forms. In one, in the countryside, man controls and moulds natural attributes into combinations which are useful and which, because they are orderly and reverently humanized, are beautiful also. In the other, in the town, he creates something with artificial forms, something startlingly new, something absolutely of his own entirely independent making: not a mere moulding this time but a personal creation from nothing. Two fundamentally different things; capable of two fundamentally different types of beauty; each heightening the beauty of the other by the sharpness of their contrasts. Is it not a thousand times more sensible to maintain these two individual entities of beauty in their full purity, in all their dramatic contrast, setting them off one against the other, than to neutralize them into one thing, where they compete and clash in an exhausting disunity? Surely two distinct types of beauty are preferable to one piece of childish prettiness. There is no avoiding the figures we have already used. Town and country: male and female. Town-country: hermaphrodite.

A town is simply in its material basis an immense architectural composition. Its whole material basis is artificial. It has nothing to do with natural forms. It is a thing utterly apart from Nature. It is, of course, affected to a certain extent by natural attributes. The sun shines upon it, clouds pass over it, rivers flow through it, wind and water play upon its surfaces. So trees and grass may be given some place in it. But their place is one of complete subordination to the artificial forms that surround them: they must be disciplined, sophisticated and formalized, to reflect or contrast with, but also to become a part of, the predominant formality. For the artistic success of the composition, they must not be allowed to enter into equal competition with the artificial forms. If they do, the result is bound to be aesthetic conflict reflecting conflict of purpose and uncertainty. That is what happens in the garden-city. A town is artificial, formalized: it should always remain so.

Or, perhaps, rather than one immense architectural composition we should have said that the town should be a *series* of architectural compositions, of streets, squares, circuses, &c., each of which is a composed unity, a complete picture in itself, in sympathetic relationship to its neighbours whether in concord or in formal contrast. And herein, through its provision of a succession of compositions, of

street-pictures, the formal town can be infinitely more various and more exciting than the drearily informal town-country.

It is curious that it should have been the desire for the 'picturesque' which popularized the garden-city and destroyed the formal town, for picturesqueness is nothing more than the quality of being like, or being fit to be the subject of, a picture. And since a picture demands composition, unity, balance, and scale, the formal street or square, having the capacity for these qualities, may have the highest degree of picturesqueness, whereas the garden-city street of informal detached houses, being fundamentally incapable of such qualities, has no picturesqueness even though every individual house in it may be a perfect picture in itself.

The creation of a varying succession of street-pictures is one of the highest functions of Civic Design. And the display of such a pictorial progression is one of the greatest delights of the town. Every town should possess at least one striking major street-picture which will provide a perpetual interest, a central point of articulation for its civic life. But every one of its minor streets should be designed with the most deliberate art for pictorial effect. Their success will depend partly on the broad massing of their buildings, on the relation in scale of the solids to the spaces between them, that is, between the height and pictorial 'depth' of the facing buildings and the width of their intervening road—(and for our low-pitched English houses the comparatively narrow, straight, and *short* street and the small square alone are likely to be satisfactory)—and partly on their architectural treatment.¹ But everywhere the gap-divided, tree-enfolded, garden-surrounded individual houses and the loosely-curving, wide roads of open-development practice are quite impossible of pictorial composition. And everywhere continuous and close building is an aesthetic necessity for the true expression of the town-medium.

But it is not only a question of aesthetic composition. It is not only a question even of preserving a traditional antithesis. It is a question of dignity and worthiness. Little dwellings crouching separately under trees on either side of a great space—how can they look other than mean and contemptible? They are unworthy of us. We want something to reflect our achievement, our great over-topping of Nature: something that is a worthy symbol of civilization, 'of society, of broad expanding sympathies, of science, art and culture'. That we can only get through pure medium, the town. Town-country, garden-city will never give it. Only sheer, triumphant, unadulterated urbanity will.

¹ For an admirable philosophical consideration of architectural urbanity and social expression, see *Good and Bad Manners in Architecture*, by A. Trystan Edwards.

Since Nature is so accessible in her own place, let us be free of her in our towns. We must strive for sheer urbanity in one place as we must strive for sheer rusticity in the other.

It is sometimes suggested that the town should grow out of the country in a steady gradation: first rusticity, then rusticity-cum-a-little-urbanity, then rusticity-cum-equal-urbanity, and so on, with each culminating point transcending the preceding one in respect of dignity and importance till we reach urbanity at last in the very centre. It should do nothing of the kind. The country should end and the town begin emphatically, unmistakably, and finally. Let the town be sheerly, unalterably urban in its beginning, in its centre, and in its end. And let the country at its edge be sheerly, unequivocally rural.

We must return to Civic Design. For thirty years we have been building towns on principles which were founded for their destruction. To-day Civic Design is illegal. We must quash its prohibition. Maybe we cannot make it compulsory on all. But at least we must make it permissive.

We must return to Architecture. Let us again have *streets* of houses grouped closely together, clear in their symbolism of social order, pure, strong and independent in their material beauty. Let us again build TOWNS. Let us be rid once and for all of the beastliness of the Herma-phrodite, with its neutrality, its sterility, its deformed and unnatural ugliness. Let us return, after a century-long interval of barbarism and romanticism, to reality and the true and dignified expression of civilization.

That we have not lost the power of that expression is occasionally proved in isolated instances in various parts of the country. Many of the blocks of flats erected in recent years by the London County Council are noble essays in the true and native style of English urban architecture—(would that we had more blocks of flats to break above the lowly and monotonous roof-lines of our modern towns!). In Liverpool occasional continuous blocks of eight or ten houses have been allowed astonishingly and excitingly to break into that vast, level, unbroken desert of a municipal housing scheme which houses nearly 50,000 people at Norris Green. But most inspiring of all is that return to realism which was made in the early years of the war by Professor Adshead and Mr. S. C. Ramsey in their development of the Prince of Wales's Duchy of Cornwall estate at Kennington in south-east London. Here is the one piece of *urban* building since Ebenezer Howard. Though the large-scale expression which these realists deserved was not afforded them by the small and scattered sites on which they worked, they gave to the simplest materials and the most modest

buildings the finest grace of civilized elegance in street and square. When one sighs for the urbanity of Bath and Edinburgh one is reminded that such spacious houses as those of Royal Crescent and Moray Place are no longer required—for our modern merchant princes prefer romanticism in Southport and Harrogate—and that such urbanity cannot now be achieved. But here in Kennington it is achieved in squat little five-room workmen's cottages at a gross density of 24 and a net density of 35 houses per acre. Which proves that the fault is not in our stars 'but in ourselves that we are underlings'. Beside the welter of thousands of garden-city developments what a fine grace, what a dignified simplicity, what a pleasant and proper civic expression is here! And when we have got rid of garden-city romanticism we may have whole towns built in as beautiful and civilized a fashion.

CHAPTER VIII

TOWN GROWTH

I. GENERALLY

THE city that cannot afford to be sheerly urban, that has pushed the country so far away that it must needs imitate it in its own area and must steal leaven to make itself tolerable, has grown too large to be habitable. The ideal town is the one of such a size that by keeping the country within easy reach of its inhabitants it can maintain its own character undefiled. The people of the ancient world knew this, for they had a maxim that a city should only be so large that its inhabitants could easily walk out of it on their own legs.

Most of the important cities of the modern world have grown far beyond this desirable size, and an almost complete severance of their populations from the countryside has resulted. There have also resulted other evils, more visibly distressing because they affect the pockets and the bodies if not the souls of city-dwellers. These things Howard and his contemporaries realized, and for their amelioration they advocated Town-Country. If Town-Country is no longer acceptable to us we must offer some other means of amelioration in its stead.

2. SIMPLE CENTRALIZATION IN GREAT CITIES

In the cities of the modern world we see simple centralization carried to a wild excess. Glasgow, Birmingham, Manchester and Liverpool have all, with their adjoining though separately administered suburbs, reached populations of over 1,000,000 inhabitants. Paris, Berlin, Vienna, Moscow, and other cities number their inhabitants by the several millions. London has over 7,000,000 (more than twice the population of all Ireland). New York has nearly 9,000,000 and anticipates having 21,000,000 by 1965.

All these cities are more or less unorganized simple agglomerations. They have what are known as 'centres' and 'suburbs', but these are vague and quite without rational or organized relationships to one another. Houses, shops, offices, warehouses and factories are all mixed together indiscriminately in the most accidental and irrational fashion, with the result that the characteristic of such cities is a gross congestion of the various agglomerated units. From this congestion all manner of social and economic evils arise. Houses have been so shut in, in the smoke- and stench-polluted city air, as to be unhealthy and most miserably depressing. Factories and business

premises have become so jammed together or so hemmed in by other buildings that necessary extensions and alterations have been rendered impossible, and the proper development of industry and commerce has been held in a kind of stranglehold. Traffic, the free movement of people and goods, the very life-blood of the community, continues to grow on streets of entirely inadequate proportions, and gets ever more deeply into a state of nightmare confusion and approaches ever more nearly to a state of complete and deathly stagnation. And because of the continually intensive concentration of the city, site values soar to such fantastic heights that they blockade all attempts at the removal of these evils.

These things are all obvious in existing cities. But they do not of themselves condemn centralization. They condemn congestion. The question is, therefore, whether or not congestion is separable from centralization when it is carried to such an extreme degree as it is in the modern city.

The Regional Planning authorities of New York look forward cheerfully to the New York centralization reaching its 21,000,000 inhabitants in 1965 because they believe that congestion and centralization are not inseparable.

'New York', they say, 'has never shown concern in the past with the difficulties that might arise from getting too big. Size and rapidity of growth are generally accepted as symbols of prosperity. There are many to whom size in itself without regard to whence it is leading in the matter of public well being, is accepted as a blessing. There are others to whom urban expansion on the scale of New York and London is an evil in any event. What is wrong with both points of view is that they have regard to the merits or demerits of size in itself, whereas it is the quality or character of a growth in any size (and not the quantity) with which we should be concerned.'

Let us look, then, at the various ways of arranging the various functional parts of a great centralization.

The old simple concentration where everything is huddled together is bound to result in confusion and congestion. What if there be a segregation of the various functional parts, with houses diffused in 'dormitory' suburbs or even in separate 'dormitory' towns around the periphery of a central area devoted solely to industry and commerce? This is exactly what is happening now in many large cities. What are its results? To begin with, it almost certainly results in an even worse state of congestion in the heart of the centralization than does the simple agglomeration. All movement is towards or away from the common centre, and because of increased distances to be covered there is a far greater volume of movement. So that nothing

benefits. And though the housing conditions of the population may be pleasanter and more healthy, a new evil enters into the life of the worker. The farther he is away from his employment, that is, the greater the residential diffusion around the central commercial and industrial areas, the greater is the exhaustion and expense he must suffer in reaching it. This 'friction of space', as the Americans call it,

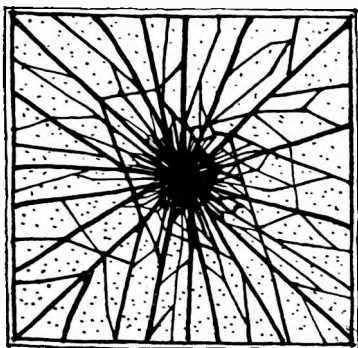


FIG. 26. Simple City-Centralization.

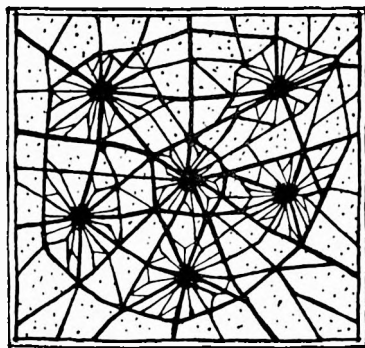


FIG. 27. Conglomerate Sub-Centralization.

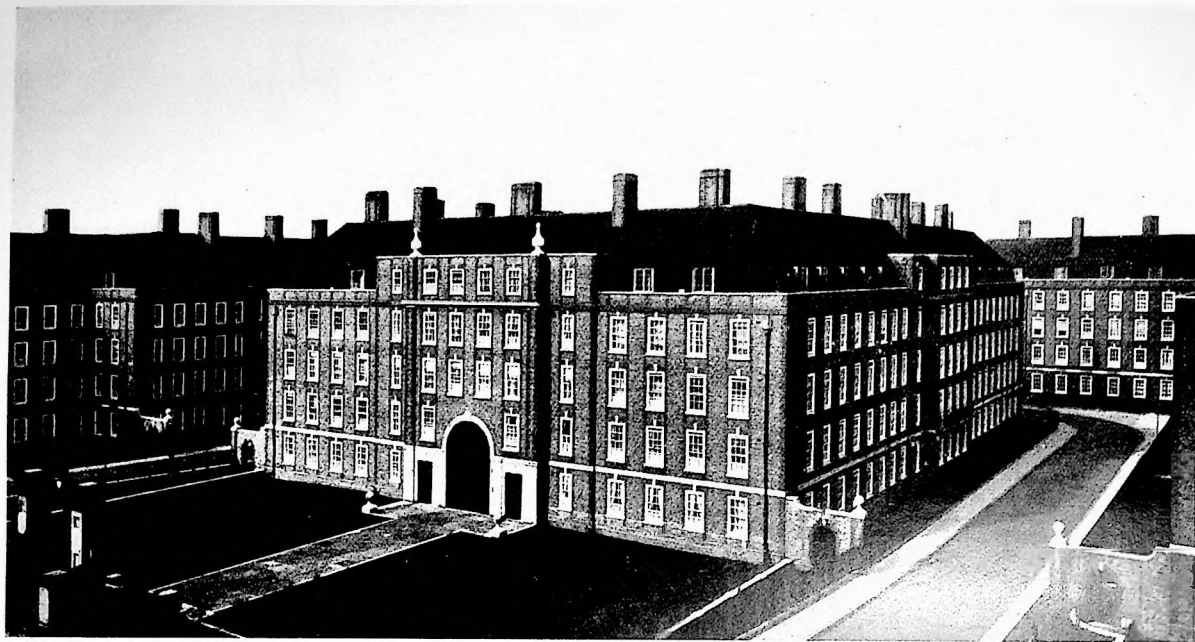
becomes eventually a matter of the utmost importance, and in the long run its disadvantages will cancel out most of the advantages the worker has derived from his improved housing conditions. It also brings its indirect injury to industry. Much of the energy the worker should expend in his factory or office is expended merely in getting there. And though his output of work is less, he demands a higher wage to cover the expenses of the very journey that has lessened his utility.

The city centralization which is a diffuse mass of residences around a concentration of industrial and commercial buildings is therefore little better on the whole and may even be worse than the simple unorganized agglomeration. The necessity of movement on the centre makes it so. What, then, if much of the necessity for this movement were removed by the dispersal of many of the units which make up the industrial centre itself?—a dispersal not into the scattered disorder of the present cities, but into a series of rationally organized industrial and commercial sub-centres around each of which would be situated the residences of the workers in the sub-centre, all distributed about a very much lessened principal centre, with the whole still forming one great agglomeration. In such an arrangement there would obviously be far less likelihood of congestion, the 'friction of



L.C.C. Housing, 1928-30

39. FLATS, ST. PANCRAS



40. FLATS, WANDSWORTH

L.C.C. Housing, 1928-30

space' and its damaging effects would largely be done away with, and since new sub-centres could continually be added as the necessity arose, the self-strangulation which is so characteristic of the modern city would to a considerable degree be rendered avoidable.

Here obviously is an arrangement capable of rational development for the economic welfare of the city and the physical welfare of the inhabitants.

3. CONGLOMERATE AND SEPARATE SUB-CENTRALIZATION

This sub-centralization within a large agglomeration has already taken place in an erratic, unscientific way in many cities. (It has usually been referred to as decentralization. But that word has been given so many meanings and has caused so much confusion in ideas, and is in fact so self-contradictory since some sort of centralization must exist in some form or other in any organized society, that it has no meaning and would be better dropped altogether.) And it is in the hope that its operation may be speeded up and rationalized that New York, for instance, looks forward to ever bigger and better cities.

But though it is the most satisfactory organization of the city idea itself and though it can afford healthy conditions of physical living to its inhabitants, an inherent and immense evil lies in it, in its divorce of its population from the countryside. The bigger it grows the more complete does that divorce become. The whole question of growth becomes involved in a most vicious circle. As the city grows the countryside is pushed farther away. As the countryside is pushed farther away it becomes necessary to compensate for its remoteness by providing large gardens to residences, large imitative natural parks, extensive playing-fields and so on; a negation, or at least a strong qualification, of the city character. And this very diffusion, which is to compensate for the countryside's remoteness, makes it continually more and more remote. The larger a city grows, therefore (after a certain point), the farther it gets away from the true city idea and the farther it pushes away the true country. When New York has a population of 21,000,000 its centre will be at least twenty-five miles away from the open countryside. Even in London to-day, with its population of 7,000,000, it is necessary to travel at least twelve, generally fifteen or more miles from the centre before one reaches really open country.

There can be little doubt that this complete divorce from the countryside which the large city entails upon its population is a deplorable thing. We have spoken of Man's over-topping of Nature. But that does not mean that he can cast her off. Divorced from contact

with her, her beauties shut away from him, the softening, broadening influences of her myriad-sided life hidden from him, his life would become a terrible, unendurable thing. He may create the pure material beauty that we have spoken of in his cities: it will not save him from ultimate disaster unless he knows, too, the beauty of the earth, unless he can feel something of what Wordsworth felt when he said:

‘These beauteous forms,
Through a long absence, have not been to me
As is a landscape to a blind man’s eye:
But oft, in lonely rooms, and ’mid the din
Of towns and cities, I have owed to them,
In hours of weariness, sensations sweet,
Felt in the blood, and felt along the heart;
And passing even into my purer mind,
With tranquil restoration. . . .

. . . Nor less, I trust,
To them I may have owed another gift,
Of aspect more sublime; that blessed mood,
In which the burthen of the mystery,
In which the heavy and the weary weight
Of all this unintelligible world,
Is lightened.’

For his evenly balanced development the town-dweller must have direct and easy access to the country. Back gardens, boulevards, landscape-parks are of no avail. They can be no substitute for the natural scene, for the great quiet spaces of the countryside, for the panorama that the seasons display over it, for sowing and reaping, for country sights and sounds, for birdsong at morning, starshine at night. Nor can swift trains that bear him out at week-ends through his fifty-, twenty-, or ten-miles-wide city. The countryside should be accessible to him on his own legs in a few minutes, or it is not really accessible at all.

The diffused sub-centralized agglomerate city, then, though it may be satisfactory for his physical life, is unsatisfactory for man’s general well-being. A still farther development of sub-centralization is necessary.

If the units of the city can be sub-centralized into related coalescent groups, they can be sub-centralized into related separate groups. And if the areas separating these groups are sufficiently wide to retain their character as natural countryside, this separate sub-centralization is the one arrangement which will provide for all the various aspects of manifold living.

And here we return to Howard. The town-country open-development practice that sprang up from *Garden-Cities of To-morrow* has had a most deplorable effect on all English towns, but that same book contained the germ of an idea which, had it been put into practice, would have meant the salvation of the great cities. At the very end of his book (in the 1902 edition) he breaks off from his consideration of general sociological questions to a brief theorizing on 'the true principles on which towns should grow'.

'Garden City has, we will suppose, grown until it has reached a population of 32,000. How shall it grow? How shall it provide for the needs of others who will be attracted by its numerous advantages? Shall it build on the zone of agricultural land which is around it, and thus for ever destroy its right to be called "Garden City"? Surely not. . . . It will grow by establishing another city some little distance beyond its own zone of "country", so that the new town may have a new zone of country of its own. . . . And this principle of growth—this principle of always preserving a belt of country around our cities, would ever be kept in mind till, in the course of time, we should have a cluster of cities, so grouped around a central city that each inhabitant of the whole group, though in one sense living in a town of small size would be in reality living in, and would enjoy all the advantages of a great and beautiful city; and yet all the fresh delights of the country—field, hedgerow and woodland—not prim parks and gardens merely—would be within a few minutes walk or ride.'

In his earlier edition of 1898 he had printed a diagram illustrating this idea. It was suppressed, no doubt because of its crude immaturity. But it is worth glancing at. It shows 'Central City' with a population of 58,000 people: four miles from the centre of this there is a circular system of six separate towns which he designates Garden City, Gladstone, Justitia, Rurisville, Philadelphia, and Concord—each with a population of 32,000, and all separated from one another by open areas of agricultural land.

From this almost casually thrown-off idea has developed the whole modern theory of satellite towns. Yet while his Town-Country idea has been universally practised, with the most evil results, this theory of town growth, though for thirty years it has been given continual lip-service by all governments and all sociologists, has been most persistently ignored in practice. Two attempts only have been made to carry it out: and both of these, at Letchworth and Welwyn which have been developed in relation to London, have met with but little support and have been only partially successful.

While Howard's town-cluster idea was originally intended as a method of safeguarding his Town-Country from an excessive growth which might destroy its true character, it is now advocated as a method

of directing the growth of large cities. It is in essence simply the idea of organized sub-centralization into separated related towns which will really be a part of a great city and will thereby benefit by its great

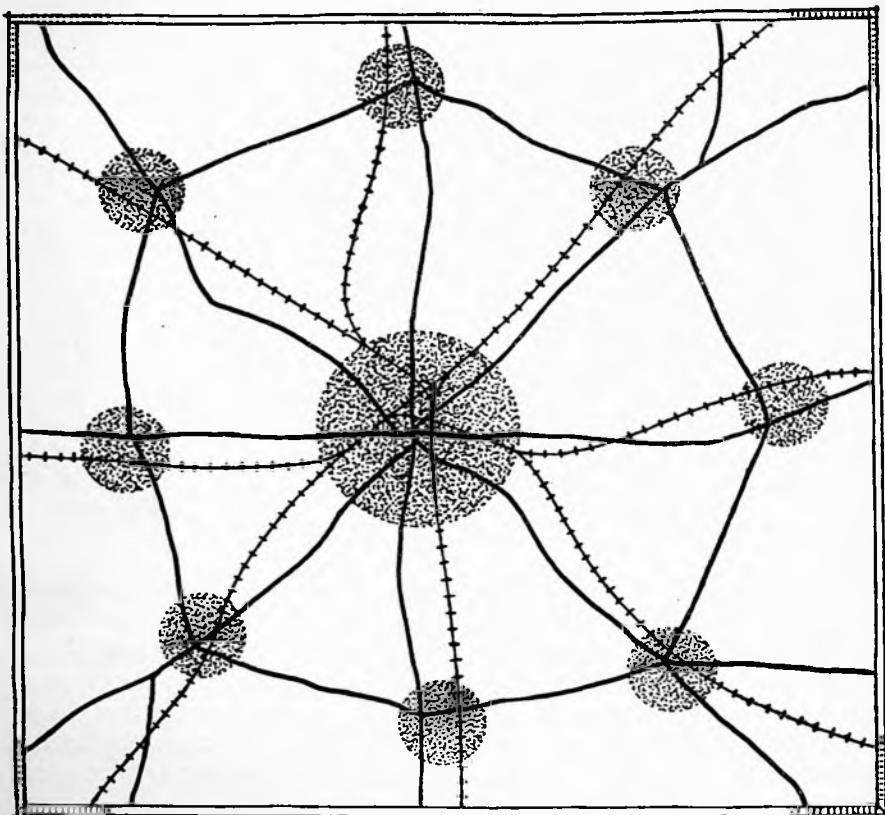


FIG. 28. Separate Sub-centralization. Town areas are shown dotted: roads in black: railways in barred lines.

corporate life, but which, in being sub-centres, will avoid the congestion, 'the friction of space' and the rest of the economic and physical disadvantages which a great centralization entails, and which, being separate, will afford their inhabitants and the inhabitants of the parent central agglomeration the easy access to the countryside that is necessary for their spiritual well-being.

Beyond any doubt, this method of directing the growth of a city is the one rational and civilized method.

4. THE SIZE OF TOWNS

If these sub-centres are to be separate, even though dependent, places, they will exist as towns and they will need to be organized as towns. They will depend on the old centre for the things that only a large city can supply; for the higher cultural, the more elaborate amusement and the more extensive commercial requirements of their populations; for the financial and directorial requirements of their industries. But they will need themselves to be sufficiently self-contained and self-reliant to sustain the ordinary everyday requirements of social and industrial life. Here then a number of questions arise as to what size these satellites should be, and at what distance from their Sun they should be situated, if they are in themselves to be satisfying places to live in.

In this industrial age the development of towns depends very largely, if not solely, on the interplay between industry and labour. Labour depends on industry: industry depends on labour: and together they are the foundation of the town. Theoretically, at any rate, labour is the more mobile. With sufficient time and trouble a supply can be obtained almost anywhere. But much of industry is also mobile nowadays. No longer dependent on railways and waterways for its transport facilities it can go wherever roads can go. So that the interplay between the two is about evenly balanced and which comes to which often depends on either accident or urgency.

From this it might seem that industry may be independent of towns, that each industry might gather its own labour to itself and migrate, if it thought fit, to a remote part of the country. But, for several reasons it cannot successfully do so. In recent years there have been a number of experiments towards this end. Prompted by various motives, industrialists have transported their machinery and labour *en bloc* from town to country. For a while the experiments seem to have been successful. But in the long run they generally prove to have failed.

It is fundamentally necessary, both for labour and industry, to have a *pool* on which to draw. Some degree of combination and concentration is essential. A pool of labour offers obvious advantages to industry. It facilitates rapid expansion and makes easy the rapid manning of new departments—(in this way it is quite indispensable to seasonal industries): and it stimulates a vigorous competition in labour and so helps to maintain a reasonably high standard of efficiency. A pool of industries offers still more advantages to labour. A concentration and a varied assortment of factories affords employment

for all types of labour; for men, women, boys and girls; whereas isolated industries generally offer employment only for one type and many members of a family who are otherwise employable are left idle and dependent. A large pool also offers opportunities for a varied industrial experience—a valuable thing in such uncertain times as the present. It provides possibilities of alternative employment. It helps to balance the fluctuations of seasonal occupations. And since a considerable gathering of industries means a town, it provides opportunities for education, for professional advancement, for entertainment and for social contacts.

But as a pool may be too small to produce a satisfactory interplay between labour and industry, so it may be too large, and the very large pool of even a sub-centralized conglomerate city is generally unsatisfactory from the purely commercial point of view, as well as from others; for industrialists complain that it produces too intensive a competition for workers in busy times, and promotes a tendency for labour to change its employment lightly, often for no other purpose than variety.

There are, besides this, other ways in which too small or too large a pool may be detrimental to the proper development of industrial psychology, but into these we need not enter here. Sufficient has been said to show that neither the small village nor the great city is the instrument that is best capable of providing for a steadily adjusted interplay between labour and industry. It is fairly generally agreed to-day that that instrument is the medium-sized town of 30,000, 50,000 or even 100,000 inhabitants with a sufficiently varied assortment of industries to employ the variously constituted pool of its labour.

Another matter affecting the question of the size of towns is with regard to social and cultural services. It is probable that the larger a place is, the greater will be the cultural opportunities offered to its inhabitants—though, of course, that does not inevitably follow, for it must depend largely on the aspirations and capabilities of the inhabitants themselves. This is a matter which is hardly arguable. But the matter of social services is more open. Does the provision of social services (drainage, lighting, cleansing, recreational facilities, and the rest) become cheaper as a town continues to grow, or does it become more expensive; and if it becomes more expensive, at what point of size does farther growth become uneconomical? It is part of the policy of most town councils that every town must expand as much as it can and by its continued expansion gain in rateable value and achieve thereby improved and cheaper social services. But does

it in fact do so? Though this theory of continued growth is almost certainly a fallacy, it is difficult to explode on account of the difficulty of comparing the different social services in different towns. There is undoubtedly a field, here, for much profitable research, not only on the size above which social services become increasingly expensive but on the size below which they cannot satisfactorily be provided to any full extent. There seems to be a singular absence of any material on which to base a scientific conclusion at present. A recent Royal Commission on London Government which pointed out that the cost per head of administration was higher in London than in any other English city, being 63s. 9d. as against 48s. 6d. in the next six greatest boroughs, does, however, give some indication of the facts. And a recent investigation reported from America where it was found that after a population of 30,000 has been reached there is a steady but definitely marked rise in the cost of governmental and social services, seems also to bear out casual observation in this country.

The size of a town should also be determined by the desirability of having the countryside easily accessible to all the town's inhabitants. What is a reasonable distance for a citizen to have to walk out 'on his own legs'? That is a debatable point; but a mile may be regarded as a reasonable maximum, and for theoretical purposes a two-miles-wide circle may be regarded as the maximum area for a town affording this reasonable country access. The size of the town in terms of population will depend on its degree of diffuseness or compactness. At an average density of twenty houses per acre, and allowing sufficient area for industries, &c., and for such small formal parks and public gardens as would alone be necessary with the country so close at hand (see page 203) this area would accommodate a population of some 150,000. Even at so low a density as five houses per acre (Welwyn's density, which, however, heaven forbid!) it would give a population of rather more than 35,000.

On all these points, then, on the interplay between labour and industry, on the question of economic social services, on the accessibility of the countryside to its inhabitants, the town of anywhere between 30,000 and 150,000 appears, as far as we have been able to examine the scanty evidences, to be the most desirable. That is probably true both for independent and for satellite towns.

There is one other point which concerns the success of a satellite town foundation. The farther the satellites are away from their parent city, the farther they will be removed from the sustenance it provides them, and the farther they are away from this sustenance the less likely they are to develop fully. But if they are not sufficiently removed

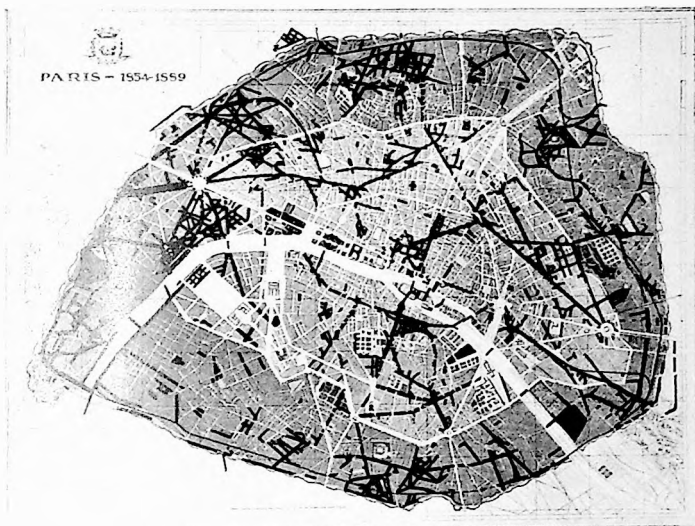
from the central city they are likely to fail in their intention, for as the parent develops (as it is bound to do, though to a very much lessened extent, so long as it remains a living organism), parent and offspring would tend to coalesce, and so the whole purpose would be defeated. Howard's theoretical satellites were situated less than four miles from the *centre* of their central planet: but his practical satellite, Letchworth, was situated twenty-five miles beyond the *edge* of London and away from a main line of communication at that; and Welwyn, the second satellite, was some twelve or fourteen miles from the edge of the city. A distance of four miles is obviously insufficient in the case of a rapidly growing monster city like London, unless growth in that direction be almost completely restricted: but in the case of a much smaller city like, say, Sheffield, or even Liverpool, a distance of four or five miles from the edge of the existing development might be perfectly satisfactory, and a distance of fifteen or twenty-five miles almost certainly fatal for the establishment of a satellite. The desirable distance of satellite from centre is probably in a rather loose proportion to the size of the centre (though a distance of three miles might be regarded as a minimum), and is certainly influenced by the comparative times taken for travel on the congested lines between centre and the ordinary suburb, and between centre and satellite on the freer main lines of communication.

5. QUALITY AND QUANTITY

To sum up, then, these questions of the quality and the quantity of town growth.

It is evident that they are closely related. A town has a purely material basis: it is essentially a series of related architectural compositions: it is capable of pure individual beauty as a work of art. But when the town grows to such an extent that man is shut off by it from contact with natural things, its purely material beauty begins to pall upon him, and he seeks to qualify it by bringing in natural objects and by lessening the purity of its material basis. And the more the great city grows the more he will qualify the character, the more dilute the density of the thing that separates him from the countryside. The ideal, therefore, is to keep the town in such quantity that its quality may be preserved.

But it is also evident that, besides being related, these questions of quality and quantity are at present curiously confused. Modern town-reformers have confused the relation between a disease and its cure; and because dilution and diffusion may, perhaps, to some extent ameliorate the condition of one diseased object, the overgrown city,



41. PARIS: HAUSSMANN'S WORK

The black lines show the street improvements carried out in thirty-five years



'Town Planning in Practice'

42. RUE CASTIGLIONE, PARIS



'Architects Journal'

43. ARCADING, BATH



44. CITY PARKWAY, LIVERPOOL

they apply it to other objects, the normal-sized towns, which show not the slightest manifestation of disease; and, as often happens, what relieves the diseased poisons the healthy. They go farther even than that. They say that a large city can be improved in two ways: by diffusion, or by breaking up its great conglomerate bulk into a number of small separate bulks; and they then apply both remedies. They break up the increasing bulk of the city into satellite towns and then diffuse the satellite towns! All of which is rather like saying that because an old man may be improved in health by having all his teeth drawn, it is right to extract all the teeth of all children and all the young and middle-aged, and indeed everybody under the sun.

Such confusion and quackery is quite absurd. The thing is surely simple enough. There are the two ancient antithetical forms: town and country. Each is capable of a perfect beauty as long as they are kept pure and individual. Each can absorb a little of the other: the natural forms of the country can absorb some few sympathetic material forms of the town: the town can absorb some few sympathetic (i.e. formalized) natural forms of the country. But in each, equal competition, or anything even approaching equal competition, of the different forms is traditionally revolting and aesthetically disastrous. The pure town-form is only acceptable when it is not omnipresent but easily escapable; that is, when the countryside is easily accessible from all parts of it. But when it is not easily escapable, to negative its character by the introduction of natural forms is not only to create the traditionally revolting and the aesthetically disastrous; it is to push the object to which escape is desired—the country—still farther away. The only way to preserve both these things, the town and the country, is to use the town-form only to such an extent that it may be kept pure.

Purely material great cities overweigh their inhabitants. Diffused cities have no beauty themselves and divorce their inhabitants from the countryside. Diffused small towns and garden-cities have no beauty either, only a dreary barrenness. The smallish town, compact as is consistent with public health, pure in its material basis, grouped into complete architectural compositions: this, a sheer town of anywhere between 30,000 and 150,000 inhabitants, is the quality and quantity which will best serve the needs of mankind.

CHAPTER IX

URBAN ROADS AND TRANSPORT

I. CHEQUER-BOARDS, RADIALS, AND RINGS

THE necessity of having roads to give access between its various parts has naturally always been one of the chief determining factors in the building of a town. To-day in a Transport Age it is quite the most determining factor. The classification of principal streets as arteries is not a euphemism. Streets are the channels along which flows the very life-blood of the social organism. Without a satisfactory street-system no city of to-day can continue to exist. If the system becomes clogged or in any way unhealthy, the whole body corporate must become diseased and exhausted.

There are two types of town streets that are widely differentiated. There is the through-communication route whose primary function is the facilitation of the movement of traffic between points external to itself or its immediate vicinity, and whose function of providing access to the buildings adjoining or immediately surrounding it is merely of a secondary nature. There is the by-road or local street, whose one and only function is that same provision of access to its immediately adjoining and surrounding buildings. So far as traffic is concerned we need consider only the through-communication streets, remembering that even these vary greatly in the degree to which their traffic-character preponderates over their access-character.

To satisfy properly its primary function of the facilitation of the movement of traffic, the road system of a town should be so designed that it provides easy and direct passage for traffic proceeding right through the town from one side to the other, for traffic from the various extra-central districts to the centre, from any extra-central district to any other, and, in general, from any one focal point in the town to any other focal point.

Few, if any, existing towns, unless they have been re-planned, have a road-system which provides all these facilities. Most of the towns of Europe have grown naturally around some old settlement or village, and the old highways which led from the country to this point (which has almost universally become the centre of the subsequent town-growth) have necessarily been retained. The town extended along these radiating highways, starwise, and gradually the core between the highways became filled in with a jumble of unrelated streets that had only access-character. Thus it happens that most unimproved old towns are fairly well supplied with radial routes

(that is, with routes which converge about a common centre), while they suffer under a marked deficiency in ring routes and cross-town communications. In many towns on the Continent, however, though in few in this country, this natural deficiency has been mitigated by the establishment of roads on the circuits of a succession of lines of fortification which were one after the other superseded as the town expanded.

In all the consciously planned towns of the older world of Egypt, China, Greece, Rome, and even Medieval England, the street system conformed to a more or less rigid chequer-board pattern, the streets running in two directions only. This arrangement is, of course, the most obvious and elementary way of dividing any area, and consequently it has prevailed even in the consciously-planned towns of the modern world, and universally in America, where it has been carried to the last limits of absurdity. In the small ancient towns it must have worked more or less satisfactorily. As we have said, it is the most convenient and economical way of sub-dividing a town into building blocks; and after the two sole cross-communications connecting the city gates had been arranged, this was the most important thing: the speedy movement of internal traffic was of little importance. To-day it is of the utmost importance.

The chequer-board plan fails to give proper architectural emphasis to the town in that it allows its vistas to tail off in an indefinite vanishing perspective, and in that it destroys amenity by producing a monotonous effect. It fails as completely in its traffic-function as in its amenity-function. Except in two out of the multitude of possible directions, it hinders easy and swift passage between the various parts of the town. Between any one point and another, except in those two directions, all traffic must travel along two sides of a triangle. The chequer-board has neither true radials nor true rings: it lacks the two essential parts of an efficient traffic-pattern. And once the chequer-board is established it is extremely difficult satisfactorily to superimpose the radial and ring pattern upon it, though nevertheless most American cities are now being forced to undertake this expensive and not altogether satisfactory improvement.

Though the chequer-board has been, from the beginning, the universal pattern for planning *de novo*, a number of new towns have been planned (including London, as it was planned by Wren after the Great Fire), and one or two have been built, notably Washington and Karlsruhe, which have departed from the strict chequer-board pattern. It is obvious that the only street pattern that can provide for the full and proper movement of modern town traffic, and consequently the

only one which has any place in the modern world, is a pattern based on this spider's web of rings and radials.

The spider's web is, of course, only the theoretic pattern. It could never be applied in its full purity either to a new town foundation or

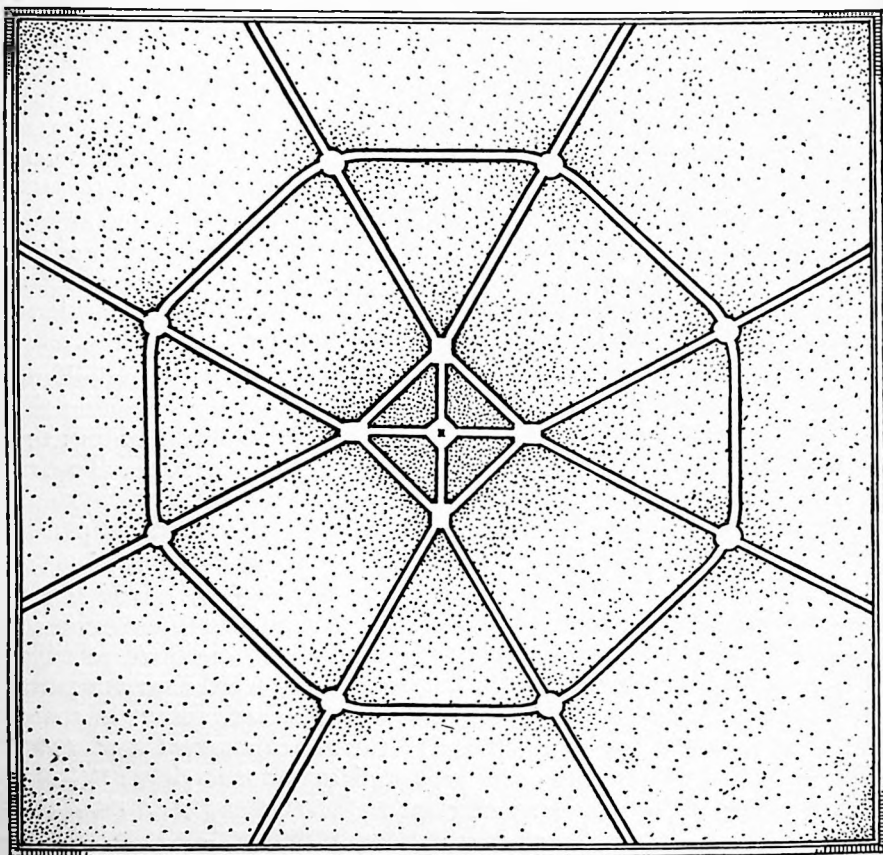


FIG. 29. Theoretic town-pattern of radials and rings.

to an old town improvement. It will be humanized by the special circumstances and requirements of each town in its own individual functioning: it will be modified by the natural character and limitations of the site to which it is to be applied. In its purity the pattern presupposes that the town will have only one centre towards which everything will be attracted. Actually, though it will necessarily have one dominant centre, it will also have, according to its own individual character, a number of competing local centres which will pull the

theoretic pattern considerably out of shape, leaving it, perhaps, almost unrecognizable.

Rigidity to any fixed road pattern is unsatisfactory. The pure chequer-board of most American cities is inherently absurd. The modified chequer-board is merely making the best of a very bad job. A system of radials and rings, adapted to meet the requirements of each individual case, is the ideal system of 'through communications'.

2. TRAFFIC REQUIREMENTS AND STREET CAPACITY

While the pattern, or the direction of streets, is the first thing to be considered in the design of a new town or the improvement of an old one, the most perfect pattern in the world will be inefficient unless the various parts of it have been considered in detail—unless, for instance, the individual streets are sufficiently wide to accommodate the traffic using or desiring to use them, and unless the gradients are sufficiently easy to cause no inconvenience to that traffic. It is necessary, therefore, to study the conditions which traffic requires for safety and speed as it moves along a street.

Two conditions can immediately be settled in the light of past experience. It is now generally considered that a gradient of 1 in 20 is the desirable maximum for a slope on a main road; though where there is little or no heavy horse traffic a maximum of 1 in 15 may be practicable. It is also generally recognized that the desirable standard unit of width per vehicle (allowing for the actual maximum width of motor vehicles and a safety margin of passage) is 10 feet for moving vehicles, and 8 feet for standing or parked vehicles. Upon this 10 feet unit must be based the width of any carriage-way. Thus, as we have seen in connexion with country roads, a carriage-way providing for four moving streams, or lanes, of traffic, two in each direction, should be 40 feet wide.

Though the far larger question of street capacity has received hardly any attention in England, it has recently been the subject of some study in America. Most of the information at present available has been gathered by the authors of the New York Regional Plan, who through careful observations have arrived at the following conclusions:¹

(a) The true measure of street capacity is a function of both number of vehicles and speed.

(b) Wide undivided carriage-ways with room for several lanes of vehicles but no provision to prevent cars from shifting between different parts of the roadway are much less efficient per lane than

¹ *New York Regional Plan*, vol. iii.

narrow roadways where vehicles are required to keep within a definite lane.

(c) On a street with several moving lanes the average lane capacity will probably not exceed two-thirds of the maximum single lane capacity.

(d) Because of the greater safety distance required between cars as the speed increases, the number of vehicles which can pass a given point per hour *decreases* after the speed exceeds 15 miles per hour.

(e) 1,880 vehicles per hour is the maximum that might be expected on a single lane of uninterrupted traffic on an unobstructed roadway; and this could be obtained with speed of 15 miles per hour.

This last conclusion is borne out by records taken by the Committee on Street Economics, U.S.A., which show that on a busy thoroughfare with duplicate carriage-ways each 21 feet 6 inches wide (i.e. four lanes), the use per lane at speeds of approximately 20 miles per hour was about 1,400 vehicles per hour. And in this country, an actual count on London Bridge has revealed 1,200 vehicles per lane per hour. But these figures apply to ideal conditions—which rarely prevail; and, as the authors of the New York Plan concede, the lane capacity per hour, under ordinary conditions of interrupted movement due to cross traffic and other causes, is likely to be as little as one-half or even one-third of the maximum of 1,880 vehicles per hour.

Despite these conditions of traffic-movement per lane, there does not follow a direct ratio between gross width and street capacity. An extreme width of carriage-way leads only to confusion for vehicular and disaster for pedestrian traffic; and there is now an almost universal consensus of expert opinion that a width of 40 feet, allowing for four lanes of moving traffic, is the maximum width for safety and convenience in a single carriage-way. From this it follows that on a highway carrying a greater volume of traffic than can be accommodated on an unobstructed carriage-way 40 feet wide, the gross width of carriage-way which is required should be subdivided into two or more separate carriage-ways. This can be done in several ways. There may be two carriage-ways, each used by one-way traffic: there may be three, the centre one used by fast traffic in both directions and the two side ones used by one-way stopping or slow traffic: or there may be four, the two central ones used by one-way fast traffic and the two side ones by one-way slow or stopping traffic. And so on. But it is a governing principle of street design that simplicity is more efficient than intricacy. Extravagant or involved subdivision is likely to defeat its own object, and so when a highway has reached the traffic condition that requires such subdivision, it is time it was relieved of some of its

traffic by a supplementary highway. In the central business areas of a town, duplicate, triplicate and intricate carriage-ways are a serious handicap to a street's many-sided functioning, and they have no place there. In those areas, however, a carriage-way width of 40 feet will often be insufficient for the traffic. There it will be necessary to allow for two lanes of moving traffic in each direction and for one lane of parked or standing vehicles along each kerb. Because the total width of such a street will be too great for pedestrians to cross it safely, it will be necessary to punctuate the carriage-way frequently, say at every 100 yards and on either side of a crossing, with refuges or islands. Allowing 4 feet for the width of these islands, 10 feet each for the four moving lanes and 8 feet each for the two standing lanes, 60 feet may therefore be regarded as a safe and efficient width for a central city carriage-way in certain conditions.

Two other conditions besides satisfactory street-width are required to give rapid movement of traffic and effective street capacity; they are—the minimum of interruption from cross streams of traffic at road junctions, and the minimum of obstruction from standing vehicles or vehicles moving at a rate lower than that of the general stream. The first of these conditions is inherent in any well-designed road system, and is easily obtainable with the ring and radial pattern. Here the cores between the main roads can be filled and access provided to them only at specially suitable points, and it is now generally accepted that, as far as possible, there should only be one access junction to a main route every quarter of a mile or more—a fairly easily obtainable condition, except in the very centre of a town, where, in any case, such a condition is often undesirable. The chequer-board pattern, however, assures the maximum of interruption by providing not only a junction but a crossing at every hundred yards.

The second condition relates to a factor which is matter for police regulation and which is, therefore, largely external to the planning of a street system.

3. TRAFFIC CONGESTION IN CENTRAL AREAS: THE COST

Practically every one of the large cities of the world, and the majority of towns with a population of over 100,000, and even numbers of towns below that population, suffer to-day to an acute degree from the congestion of the traffic on the streets of their central areas. This congestion results in personal discomfort and inconvenience to vast numbers of people, and in monetary loss on a gigantic scale to all sections of the community.

The existence of personal discomfort and inconvenience is difficult

to prove by statistics, but any one who has ever ridden in a taxi or bus or private car in the busy streets of London, Paris, New York, or any other large city, needs no statistics to prove that it does exist. The average speed of traffic throughout the day in central London is 8 miles per hour. In certain places at certain times it can be as low as 4 miles per hour, and it is often quicker, though perhaps more dangerous, to walk than to ride.

Statistics regarding economic loss are more readily accessible. The London General Omnibus Company in 1929 estimated that if the average speed of traffic could be raised from 8 to 10 miles per hour (surely a modest hope!) the saving to the company alone would amount to £1,000 a day or over £300,000 a year. Even as things are it is stated that delays from congestion cost this company, in 1927, no less than £1,000,000 in actual out-of-pocket expenses, because the services could not be run as scheduled even at 8 miles per hour! A great firm of caterers, Messrs. Lyons, finds that congestion doubles their cost of delivery, making the cost per call 6s. 8d. as against the 3s. 4d. which a call costs out of congested hours, that is, by night. The Ministry of Transport has estimated the cost of delay at one point alone, the Iron Bridge, Canning Town, at £1,000 per day. The President of the Commercial Motor Users Association estimates the cost of congestion within a three-mile radius of Charing Cross to be about £35,000 per day. In Worcester, Massachusetts, a town of about 200,000 inhabitants, it has been estimated, from very careful observations, that congestion in the central streets costs £7,000 per day. In Cincinnati, a town of 400,000 inhabitants, the cost is estimated at £20,000 per day. In Chicago the estimated cost of *allowing cars to park* in the 'Loop District' (the business centre) is £40,000 per day. In Manhattan alone the cost of congestion is estimated at £100,000 per day, while it is estimated by the authorities of the New York Regional Plan that the cost in the whole region of New York is approximately £200,000 per day, which represents the interest at 5 per cent. on a capital sum of £1,460,000,000. Another estimate puts the loss in Greater New York slightly less, at £110,000,000 annually, which is £5,500,000 more than the City budget for 1927.

These instances and estimates of the cost of congestion could be multiplied, but they provide sufficient evidence to show the seriousness of the position. It should be observed how much higher the American figures are than the English. The cost on Manhattan Island is about £35,000,000 per annum: the cost within a three-mile radius of Charing Cross, or for an area half as big again, is estimated at a third of that. But we have as yet only about an

eighth of the number of cars in proportion to population that exists in America!

What is the cause of this congestion? Except in so far as it arises from the mixed character of the traffic itself (a by no means negligible contributory factor) congestion is the result of a deficient street system, and the deficient street system is the result of inadequate planning, or more generally of no planning at all.

The street systems of nearly all our great towns are the street systems which were deemed sufficient fifty, a hundred, two hundred years ago. They remain practically the same as they did then. New growths and extensions upwards and outwards have been added to the cities, new habits of intensified travel have been acquired by their populations. An entirely new set of conditions exists. But the old street systems remain. Every five years the traffic on the streets is doubled, but the same streets serve it.

4. CAUSES OF CONGESTION

These old street systems fail for four broad reasons. They fail because of the infrequency of proper arterial routes; because of the inadequacy of the routes that exist; because of the frequency of crossings; and because of the lack of proper relation between individual streets and the functions and capacities of the buildings fronting or adjoining them. In the improvement of a city's street system all these causes of failure and the means of their removal must be considered simultaneously, for they are closely interwoven and interdependent. In other words an existing town, as much as a proposed town, requires a considered plan of development. It is of little use improving a street system without relating it to the zoning of buildings as to character and capacity, and it is as little use zoning buildings as to character and capacity without consideration of the street system.

The present street systems fail, firstly, because of the infrequency of proper arterial routes. Of all the causes of failure, this one has been the most neglected, and in English towns at any rate little or no attempt has been made towards its removal. The reason is obvious: it is generally costly. To blast a wide arterial road through a densely-built area requires imagination, courage—and money. Not so much money as is sometimes thought, however. The thing can be done by a bold use of the blessed gospel of opportunism, by the inevitability of gradualness. To obtain a new road where none has been before does not mean that suddenly, one Monday morning, ten thousand navvies and house-breakers will descend and pitch their camps and 'will not cease from mortal strife' till the new road runs clean and wide and complete. It

means the seizing of the apparently small opportunities that occur as rebuilding takes place and as leases expire, and, from the continued seizing of these opportunities, the gradual realization of a scheme that may have occupied years between its inauguration and completion. There has been an immense amount of rebuilding in the central areas of our large towns during the last decade, and there has been a lamentable missing of the opportunities that this rebuilding has afforded. If the road to Hell is paved with good intentions, the road to congestion (which may eventually be Hell's synonym) has been paved with lost opportunities.

Rationalized opportunism requires a pre-determined rational plan; and a rational plan is a plan for the whole course of the action, not merely for an isolated section of it. The most inspiring and almost the sole example of rationalized opportunism in town improvement is the street system in Paris. There, two or three generations ago, Haussmann and his associates designed a scheme for a complete replanning—which has been steadily realizing from that day to this. The imagination and courage shown in designing and executing that scheme, long before the advent of motor transport, was stupendous. And the result is magnificent.

Since the War there have been many great new roads driven through the country on the outskirts of our towns. There has been little or nothing done in the central areas. And so we have the absurd position that where the traffic is densest the street capacity is lowest. The special reason given for this inactivity is the cost. But the question of cost can be over-emphasized and should be examined in the light of results. London's one big piece of street planning, Kingsway, cost £5,000,000. It has already paid for itself and is providing a substantial income. The Michigan Avenue improvement in Chicago cost 16,000,000 dollars. It has, by increasing property values by more than 100,000,000 dollars, paid for itself more than six times over. There are hundreds of similar instances. And these benefits take no account of the saving of those gigantic costs of congestion which have already been referred to.

It is obvious that great schemes for the reconditioning of existing towns will have to be made and executed.

The old street systems fail, secondly, because of the inadequacy of the existing arteries, as well as from their infrequency. All the considerations as to the making of new routes apply to the improving of the old. Here as much as there boldness, imagination, sound planning and the application of the inevitability of gradualness are necessary.

The failure of these existing streets results from their narrowness;

from the frequency of crossings and junctions, and from insufficiency of space at these crossings to allow of the proper circulation of the traffic.

The congestion caused by the narrowness of an existing street may be relieved by the construction of one of the new routes which have just been referred to. A congested radial may be relieved by the provision of a new ring loop which would act as a by-pass, for the cause of congestion may lie as much in a deficiency in the general system as in the narrowness of this one link, and in such a case the widening of the street may be unnecessary. But where widening is necessary it may sometimes be found as difficult as or more difficult than the construction of an entirely new route. Then the possibility of improvement by arcading should be seriously considered. This means the setting back of the ground floor of the buildings behind a series of arches supporting the upper floors, the space behind the arches being used for the footpaths and the carriage-way being widened to absorb most of the width that the original footpaths occupied. In this way 20 feet may often be added to the width of the carriage-way, at a cost much less than the cost of setting back the whole full height of the buildings. One apparently small matter is of prime importance for the safety of the pedestrians using the footpath: this is that a narrow footpath should be provided *outside* the arcade so that a pedestrian's observation of oncoming vehicles should be unobstructed as he steps out into the carriage-way. Arcading in itself, apart from its adaptability for street widening, can provide much amenity in the shelter it affords the pedestrian against rain and wind and extreme heat. In the uncertain climatic conditions of England it may actually be a thing to be sought after. Even the disadvantages it is said to bring to stores and shops in the obstruction of natural lighting will generally be more than balanced by the increased custom which pleasant shopping conditions will bring. Probably the most flourishing shopping street in any moderate-sized town in England is Lord Street, Southport, and its flourishing condition is very largely due to the verandahs (architecturally hideous!) which give a covered walk past the shop windows from one end of the long street to the other. The Rue de Rivoli in Paris and Bath Street in Bath are two fine examples of architecturally successful arcading.

So far as the failure of the existing street system is caused by the frequency of crossings and junctions, little improvement seems to be possible except by the provision of sufficient circulatory space for the traffic to move forward uninterruptedly, or by what is known in America as 'grade separation' through the provision of 'fly-over'

bridges or superimposed thoroughfares. The second of these methods of improvement may possibly be used in the future at a few crossings of the utmost importance where no other method of improvement would give sufficient benefit, but it is very unlikely that it will ever be used extensively, for it is not only a most expensive but a most unsightly method. It might benefit traffic but it would destroy amenity. The one really satisfactory way of avoiding congestion at crossings is by the establishment of a roundabout, or gyratory, system of movement. This requires more space than the ordinary crossing affords and it will generally entail a scheme of widening and rebuilding, but it is far more practicable than the 'fly-over' bridge, far less costly and is more often beneficial to amenity than destructive of it.

5. STREET WIDTH IN RELATION TO BUILDINGS

Existing street systems fail also because of the lack of proper relation between individual streets and the character and capacities of the buildings fronting or adjoining them.

It is obvious that the height and use of a building must have a direct effect on the traffic capacity of its adjoining street. A block of offices ten stories high will be occupied by more persons than will a two-story block of a similar ground area, and the number of persons visiting the ten-story block during the day and the number of workers entering it in the morning and leaving it in the evening will be greater than the numbers similarly using the two-story block. If the adjoining street is only wide enough to accommodate comfortably the users of the two-story block, then it will be over-crowded by the users of the ten-story block. Further, the two-story block of offices will be frequented by a greater number of people than a similar two-story dwelling-house. A four-story retail shop will give rise to more coming and going than a ten-story block of flats. And a three-story warehouse will cause more vehicular congestion than a three-story office. And so on. All this seems almost too obvious to need stating. Yet it has never yet been taken into consideration in street widenings and in rebuilding schemes. And the meaning of it has only lately been realized in America and is still not fully acknowledged in England.

The position can be made more clear by taking some extreme examples from America, the home of extreme building heights and extreme traffic congestion.

The celebrated Woolworth Building in New York stands on a plot two-thirds of an acre in extent. It has, altogether, 56 stories, 28 in the main building covering the whole of the area except the lighting wells, and 28 in the tower. It has a day population, excluding its innumerable

visitors, of 14,000 people—the population of a medium-small English town on three-quarters of an acre! (There are some sky-scrapers with populations of 25,000.) When this population leaves the building at the end of an office day an incredible state of congestion occurs in the adjoining streets—as if the crowds of a big football match debouched on to the Strand. Sir Raymond Unwin, in an extremely valuable paper on ‘Higher Building in Relation to Town Planning’, read before the Royal Institute of British Architects in December 1923, has calculated the effect that would be produced if the whole of the population of this building poured out at one time. The road in front of the building is approximately 100 feet wide, with a carriage-way of 60 feet and two footways of 20 feet each. On the basis that each footway would accommodate a maximum of ten people walking abreast with just sufficient space between them for slow movement, those 14,000 workers would occupy $1\frac{1}{4}$ miles of footway: if they were standing closely packed they would occupy a length of 2,800 feet, or well over half a mile of footway. Similarly, assuming there is one motor-car to every ten workers, and that the *full* width of the carriage-way be occupied by those cars, the cars *parked* would require a length of 4,200 feet: moving in single file, with an average length of car and space for moving of 25 feet, the queue of cars would be between 6 and 7 miles long.

Sir Raymond Unwin describes also the conditions in the Loop District of Chicago. This is the great commercial area of the city, occupying the comparatively small space of 212 acres, with the roads accounting for about 40 per cent. of the total area, and the buildings averaging 7 stories in height. Here, ‘of the 60,000 motor-cars which the present occupants of the Loop own among them, only 3,500 can find places where standing is permitted within the Loop area. If the *whole* of the road space were packed *solid* with cars, there would still be only standing room for 11,000 cars, or something like one-fifth of those owned. As a matter of fact the car owners of the Loop area have appropriated the large open space set aside for Grant Park, and it is no uncommon thing to see 25,000 motor-cars parked there at one time’. Small wonder that the motor-car is no longer an effective means of locomotion in some American cities!

Such are the results of the lack of relation between street widths and building bulks (incidentally, too, of a high ratio of cars to population). The results of the lack of relation between street widths and building uses are similar, though less spectacular and less easily definable.

The question is extremely involved. That there are fairly accurately

determinable relationships there is no doubt. And that these relationships will inevitably have to be considered in the future developments of large cities, there is no doubt either. Any suggestion to increase considerably the average building heights in London while retaining the present street widths, for instance, would simply be courting disaster. But the question is far too lengthy and far too involved to be attempted here; it is, moreover, a matter on which much intensive scientific research is still necessary, and upon which it is, as yet, too early to make any pronouncement. It is, in any case, a question which is relative only to large cities. We must therefore be content to point out its importance and to pass over it, bearing its importance in mind.¹

6. REGULATION OF TRAFFIC

A perfect street system is one which serves with safety, convenience, and the opportunity of swift movement, but without the imposition of restrictive regulations, all the traffic that desires to use it. Modern congestion has necessitated such restrictive regulation of traffic that the point of perspective seems now to have changed and the perfect condition is regarded as being that in which the traffic is so regulated that the street system is made safe and tolerably convenient: which, however, is an obviously wrong perspective, for the street system should be made to fit the necessary traffic of the town, and not the traffic fit the imperfect street system.

Nevertheless, because the street systems of existing towns do fail to meet all the needs of the traffic using them, and because there can be no finality in any project put forward for the perfecting of a street system so long as the city continues to grow and changing factors continue to produce new conditions, there must be some degree of regulation. And, so long as it is continually borne in mind that this regulation is in itself a confession of failure and is a thing to be avoided rather than to be aimed at, it is proper that the easiest possible arrangement of restrictions should be considered as part of a definite plan.

One of the most obvious arrangements is the provision of frequent and well-arranged parking places. Undoubtedly a very considerable amount of congestion does arise from the occupancy of part of a busy street by standing vehicles, and a private person cannot reasonably regard it as a hardship if he is prevented from allowing his car to interfere with other traffic while he himself is working comfortably

¹ See the paper mentioned above, 'Higher Building in Relation to Town Planning', by Sir Raymond Unwin; *Journal R.I.B.A.*, vol. xxxi, no. 5; and *Regional Plan of New York*, vol. iii.

inside his office. But he might reasonably regard it as a hardship if he were forced to park his car a mile away. Similarly both shopper and shopkeeper have just cause for complaint if a car is not allowed to stand outside a shop for such time as is reasonable for the transaction of business. Unduly restrictive regulations can be seriously damaging to business as well as inconvenient to persons, and a lack of clearness in the regulations is likely to bring perfectly law-abiding citizens into ill-temper with the law. In many towns street-parking is altogether prohibited, in others it may be allowed for half an hour, in others again for forty minutes, or in others again for an hour. Sometimes a person is forced to park his car on public property, in a square for instance, and is actually charged for so doing. Clearly if regulations are necessary they ought to be well-considered, simple, clear, and just; and if parking places are necessary, they should be provided at very frequent intervals according to a plan prepared from a consideration of the relationship of building bulk and character to street capacity.

Regulation sometimes takes the form of limiting traffic in a street to one direction. This regulation, except of course where it applies to a traffic circus, is of all regulations the most oppressive on business and, in its interference with proper highway rights, is the most unwarrantable. It is of all regulations the most open confession of civic failure.

The regulation of traffic at cross roads by automatic light controls is now an accepted feature of all towns. It is capable of inhumanly rational extension. In American cities the chequer-board pattern of the streets lends itself particularly to such a rational extension. There, congestion has been 'much relieved' by the operation of what is known as the 'platoon system' of regulation, which, by a carefully worked out arrangement of lighting controls, gathers the traffic into ' platoons' so that while one platoon is moving between a first crossing and a second, another cross-traffic platoon at right angles moves over that second crossing and just finishes moving across when the first platoon approaches and also in its turn moves across—and so on—*ad infinitum*. This, theoretically, allows traffic which is literally at cross purposes to move uninterruptedly, and actually does so in practice in the selected places where it has been operated. It demands as automatic a speed from each individual driver as it does from the regulating lights themselves and it is really a most grotesque commentary on the condition of a street system that human beings should thus be forced to act like platoons of automatons so that they can move from one place to another. But it works—in America. In any case it could be operated

in only a few places in England, where, most fortunately, our street crossings are not themselves so automatically arranged as to demand us to arrange ourselves so automatically.

One other type of regulation, the segregation of traffic, requires some consideration. Segregation is made necessary by the congestion that one type of traffic can inflict on another. The slow-moving and long-stopping horse-drawn vehicle, or the crawling and puffing steam wagon that can hold up a hundred quicker-moving vehicles, are still familiar sights even in the busiest central streets of the largest cities. It is no uncommon thing in the Strand to see traffic thrown into utter chaos by some standing vehicle which is being casually unloaded, some brick-cart, say, from which a labourer hands thousands of bricks, two at a time. That sort of thing is obviously beyond all toleration, and regulations which would direct this type of traffic along other routes or even prohibit it within congested hours, would be entirely reasonable.

7. ROADS OUTSIDE CENTRAL AREAS

The conditions which apply in the central areas to street capacity, traffic requirements and the causes of traffic congestion, apply also outside the central areas and in the suburbs. But suburban arteries differ from the central roads in a number of ways. They carry a far greater proportion of through traffic, there is much less parking along them, their creation or improvement is an altogether easier undertaking, and they are generally much more concerned with the preservation or creation of natural amenity.

It is now the pretty general practice to construct suburban arteries to a great width. Many towns have one standard width and lay-out which they apply to all main roads regardless of local conditions or requirements. If a road runs through a housing estate, or through a wood on the town's boundary, along the sea coast, or through an industrial area, the cross section is the same. In a great northern city it is actually now proposed to construct a new arterial road through a slum area in the very heart of the business centre of the town to the standardized cross section that has been used on the suburban arteries—duplicate carriage-ways, grass verges and all. The doctrinaire idea of 'the widest possible roads' has been established and is being applied with the most thorough lack of imagination. It involves a dangerous and expensive fallacy. We have already considered the question of the scale of the buildings neighbouring the roads and it may be as well briefly to consider the scale of the roads themselves.

We have seen that a width of 40 feet is generally considered the

desirable maximum for a single carriage-way, and that this, reckoning on a street capacity of about 750 vehicles per lane per hour, gives a total capacity of some 3,000 vehicles per hour to the whole road. Adding sufficient width for two footpaths 10 feet wide (rather more than ample) we get a total width of 60 feet as the actual road requirement of any but the most exceptionally heavy traffic. Thus any extra

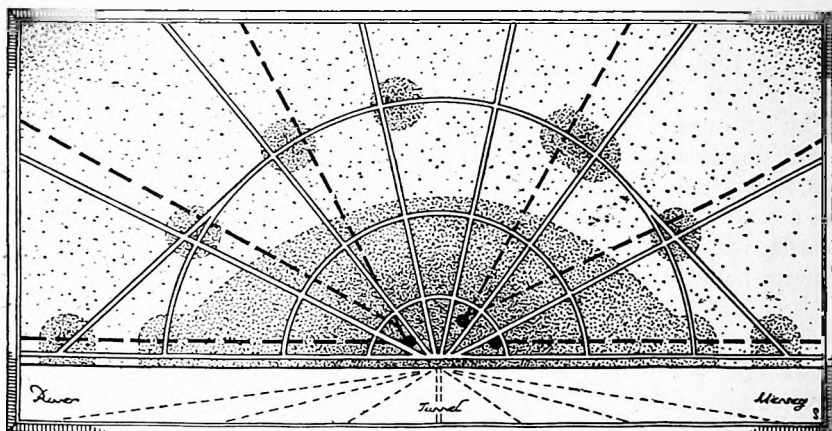


FIG. 30. Schematic Liverpool. The radial roads concentrate on the city centre which is near the water-front, from which ferries ply to the towns across the River Mersey. Of the ring roads, the inner one is imperfect, the middle one is the famous Queen's Drive, and the outer one has been proposed beyond the city boundary under a regional planning scheme. This regional planning scheme has also proposed the limitation of the extension of the city to just beyond the middle ring and the establishment of a series of satellite towns upon the outer ring. The railways are shown by broken black lines.

width above 60 feet will be provided either carelessly for no purpose, or intentionally for the supposed amenity of a wide road.

In the very few cases where 40 feet of carriage-way is insufficient for the expected traffic, duplicate or triplicate carriage-ways are necessary. Duplicate carriage-ways are likely to be as unsatisfactory in the suburbs as in the central areas. They entail a system of one-way traffic—which generally means that on the radial roads where, if anywhere, they are most likely to be required, the inward carriage-way is overloaded and the outward one under-loaded in the mornings when the traffic moves inwards to the central area, while the opposite state of affairs will occur in the evenings. A road of duplicate carriage-ways is unsatisfactory in other ways. Its dividing middle strip of grass, generally 20 or 30 feet wide, gives the road an 'unresolved duality' which is aesthetically bad. If this strip is planted with trees the appearance is still less satisfactory—unless the strip is of such great width

that the road is not in effect one road of two carriage-ways but two separate roads flanking an open space. Thus, disregarding even the question of the relative scale of the flanking buildings, the width intended 'to provide amenity' in a roadway of duplicate carriage-ways actually destroys amenity.

Triplicate carriage-ways are more satisfactory to both traffic and amenity. They will generally consist of a central carriage-way, say 40 feet wide, for fast traffic in both directions, and on each side of this, divided from it by a tree-planted grass strip, a narrow carriage-way, probably 16 feet wide for slowly-moving and stopping local traffic. This arrangement, though it requires greater width, will be more aesthetically satisfactory, more efficient for traffic and less dangerous for pedestrians than the arrangement of duplicate carriage-ways. But, in any case, the number of suburban roads requiring more than one carriage-way as a traffic necessity, could, over the whole country, be counted almost on two hands.

The idea has spread that a very wide road is in itself a pleasant and desirable thing. It is not. In a town it can be uglier than a railway track and as effective in cutting an area into separate, improperly related masses. The extra width that has been loosely provided 'for amenity' can be utterly ruinous of it. The road that has been made for scale and magnificence can so destroy scale that the houses of the surrounding town look like pigmies' dwellings. It may be reactionary to say so, but, generally, the narrower a road the more aesthetically satisfactory it is. The mistake arises through a misapplication of principles. A visit to Paris—or more often the sight of a photograph of the Champs Élysées, for one does not then realize the comparative narrowness of many of the Boulevards—fires the imagination and we go home and attempt to create another Champs Élysées in Wigan, Middlesbrough, or even our local town of 10,000 inhabitants. We plan a 150-foot road through the small garden-city of low-pitched semi-detached cottages and we get not Paris's Champs Élysées or Avenue de Breteuil nor Vienna's Ringstrasse nor Berlin's Bismarckstrasse nor Washington's Mall—but a dreary waste. Naturally.

To say this is not to make a plea for the building of roads that will be too narrow to carry their traffic. Nor is it to suggest that trees and grass have no civic function upon roads. But it is to suggest the definite necessity for the careful functional designing of every individual road. The first function of an arterial road is to carry traffic. Let the road be designed to carry that traffic with every degree of safety, speed, and comfort. Then by all means let there be added to it whatever amenity may be obtainable. But let it not be thought that

trees and grass and flowers are the only providers of amenity. Scale and architectural setting are infinitely more important in the town. If natural amenity is desired it may sometimes be obtained without destroying scale. But if extra width is given to a road 'for amenity' let it be given purposefully out of a careful definite designing which has considered all the aspects of *urban* amenity, and not out of a loose and flabby acceptance of the idea that width itself is beauty.

Of course it is not always possible to estimate in advance what the ultimate traffic on a road is likely to be, and some of the 'extra width' is sometimes intended to allow for a future widening of the carriage-way should this become necessary. That is a perfectly legitimate purpose. Thus a road may be built with an initial carriage-way 30 feet wide with space left on either side to allow for an ultimate extension to the desirable maximum width of 40 feet.

The widest type of road is the type usually designated 'parkway'. Its primary function is the provision of amenity. It is not, or should not be, an important traffic highway. In its proper form (though the name has been much debased by its application to *any* wide road) a town parkway is a rather spectacular drive and promenade, of great width, lined with trees, lawns, statuary and flower beds, piercing out from the centre of a city to some park or building of special magnificence or civic importance. Here again a sense of proportion, a sense of the innate fitness of things, is necessary. A parkway in a great city or even in a large town can be a thing of superlative beauty, a most powerful instrument of civic dignity. In a small town, running out from the municipal offices to terminate its vista on the bandstand in the public recreation ground, it is simply a pitiful piece of crude pretentiousness, like a small child's wearing a top hat.

With roads as with buildings a sense of proportion is indispensable.

8. PUBLIC TRANSPORT

So far, in discussing the question of road widths and traffic, no account has been taken of tramway systems which handicap the streets of many towns and most cities.

The future of tramways is a very vexed question over which during the last few years there has been much wordy warfare. The whole question is difficult, though the points for and against are quite obvious in it. There is, on the one hand, no doubt that since the advent of the new motor traffic the tramways, on account of their rigid inflexibility, have proved to be a serious obstacle to the free movement of the other traffic using the roads that they use. So far as that is concerned they are absolutely out of date and should undoubtedly be scrapped. They

are also noisy, and, with their network of wiring, they are ugly: they are a definite injury to the amenity of any district they pass through. On the other hand they provide cheaper travel and probably carry their passengers more compactly than any other system, and, most important of all, there has been such an enormous amount of capital sunk in them that it is impossible, without an almost crippling financial loss, for many of the local authorities to supersede their trams immediately by the natural alternative, the motor buses. In some of the smaller and middling-sized towns, a sort of bastard tram-bus, the trackless trolley, is being used in place of trams, chiefly to overcome their principal fault, inflexibility in traffic. Trolley-cars are certainly not open to at least two of the chief objections to the trams: they can drop the passengers at the kerb, and they can fall fairly easily into the stream of general traffic. They are an improvement; but by no means a solution of the difficulty. For while within their fixed routes they have reasonable flexibility, they have no real mobility: they are fixed to certain routes. A bus service can be diverted to another road if the usual road has been blocked for repairs or has become congested. A trackless trolley service cannot. And from the point of view of amenity the trolley-car system has nearly all the faults of the system it is intended to replace: it still requires the old clumsy kerb-side standards and the network of overhead wires, and though its vehicles are very quiet they are clumsy, lumbering-looking affairs. They cannot, therefore, be regarded as a final solution—no electrically propelled road vehicle can be that until it is possible for it to carry and generate its own motive power. The real present solution is the gradual supersession of trams by motor-buses; and certainly no further difficulties should be created by the extension of any existing tramway system.

Inevitably over town and country roads there will be woven an increasingly intricate web of motor-bus services. Every town will have, indeed already has, its bus transport system, with services connecting its various suburbs with the centre and with one another. These services will have to take their normal course and will have to be provided for in the town's street system. No difficulties can be allowed unduly to restrict them. But the passage of long-distance services through the town and the concentration of visiting charabancs upon it are bound to create some congestion. Already in large towns and in the busiest of the smaller ones, the passage of this external traffic is being restricted, and the bus companies are being forced to provide termini for their different 'lines' just outside the centre. This is as it should be. But it must be accompanied by an efficient linking up of these termini. At present it is not. A passenger coming into a town

by one of these long-distance lines has more often than not to walk, carrying his luggage with him, or to take an expensive taxi, between different termini, in order to continue his journey. This will have to be altered. At each terminus there should be a station and an efficient inter-termini local service should connect both the various lines and the railway stations. In a large city there should probably be a circle of these stations around, but not too far removed from, the central area.

9. AERODROMES

Though a civil aerodrome should generally be situated in the rural area at the edge of a town, it is right that it should be considered here, for it is necessarily related to the question of urban transport.

It is quite beyond doubt that there will, in the future, be a great development in aerial transport. It is, nevertheless, still a matter of conjecture, to what extent it is likely to become an everyday means of communication. This and one or two uncertainties as to the line of future mechanical improvements make the provision of aerodromes a question of some difficulty. It is difficult to decide as to the exact provision that should be made in anticipation of development. What, for instance, is the future of the helicopter or other contrivance for vertical ascent or descent? The perfection of some mechanism on these lines might not only make large aerodromes unnecessary but it might have a great effect on the future appearance of our towns by requiring flat roofs instead of our over-pitched Gothic ones—so incidentally rendering a service to urbanity. And what is the future of the amphibian plane?—a pertinent question not only for all coastal but for all riverside towns. What, again, is the future of the airship? To all these questions there are naturally only the vaguest of replies: yet in the absence of any certainty as to possible developments along these lines, to provide aerodrome facilities is to work in the dark, or at most, in the half-light. And yet, again, to delay the provision, or at least the reservation, of aerodromes is to push them, when they will be required, farther and farther away from the centres of our expanding towns—a serious result; for, to be successful and to provide its full service, an aerodrome must be as near as possible to the town centre. This last factor, however, really determines the matter. Despite the uncertainties, it is necessary to plan now—and to plan for future developments along present lines.

In an island the size of Great Britain the speed-advantage of air-travel over ground-travel either by rail or road is not nearly so apparent as it is on a widespread continent, for the greater the distance to be covered the greater becomes the speed-advantage of the aeroplane. But

still, limited as our distances are, the speed-advantages are great enough to encourage the development of air-transport even for our own insular communications, let alone for inter-European ones. For any distance over 100 miles the aeroplane has a steadily increasing speed-advantage.

Eventually there must be a multiplicity of main and minor air routes. In the near future every large or middling-sized town will have its aerodrome, and, though air routes will have to be definitely laid down and limited to protect people against what may become an intolerable nuisance, it may then be possible to get from anywhere to anywhere else by air. On the minor routes there will be as great a time advantage as on the main routes, perhaps a greater, for railway travel off the main lines is apt to be a tiresome business of slow trains and long waits at junctions. The following table, taken from a paper read by Major R. H. S. Meeling (Air Ministry) before a meeting of the Town Planning Institute in December 1928, will show the comparative times of some of direct and some cross-country journeys:

Route.	Actual time by train.		Time by air (90 m.p.h.)	
	hrs.	min.	hrs.	min.
Glasgow or Edinburgh-London	8	0 (approx.)	5	0 (approx.)
Liverpool-Hull	3	45	1	43
Glasgow-Newcastle	4	0	1	50
Swansea-Manchester	6	40	2	10
Cardiff-Middlesbrough	8	40	3	7
Leeds-Bournemouth	8	20	2	53
Birmingham-Torquay	4	55	2	14
Wolverhampton-Norwich	7	20	2	17
Aberdeen-Yarmouth	16	13	4	24
Newcastle-Birmingham	5	40	2	29

N.B.—In every case 30 minutes has been added to the time taken by air, to allow for journeys between the town centres and the aerodromes.

An aerodrome should be situated on a level site neither so low as to be subjected to heavy ground mist or fog nor so high as to be affected by the frequency of low cloud. A low plateau free from fog, smoke, and uncertain air currents is the ideal site. It should have no greater gradient in any direction than 1 in 40. The surrounding areas should be free from obstructions such as chimneys, towers, tall trees, &c., the building heights in general not rising above one-fifteenth of their distance from the edge of the landing area. The effective size of the landing area itself is in terms of the minimum length of run available in all directions. A landing space for general aircraft should, if possible, have a run of at least 800 or 1,000 yards in each direction, though a run of 600 yards may be regarded as the absolute minimum. Thus the minimum area for landing space only, in a fully equipped

aerodrome, is 60 acres, while the aerodrome itself if it extends, as it should, up to the limits of a surrounding height-zone of 25 feet, will probably be about 125 acres. The average area of aerodromes in America, which is already well developed in this direction, is 290 acres.

It is now generally considered of the utmost importance that the aerodrome should be situated as close to the centre of the town as is possible and as is compatible with the basic topographical and climatic requirements. A greater transportation time than fifteen minutes from the centre will almost certainly be a serious detriment. The emphasis on *time*, not distance, is important. Three miles of congested streets may take twenty minutes to traverse, seven miles of uncongested streets may take only the maximum of fifteen minutes. It is very important, therefore, that the aerodrome should be so situated as to have the best possible means of communication with the town centre.

It should be situated near to, but just off, one or more direct, uncongested radial highways, which will afford rapid bus and car transportation from the centre; and near, also, to an important ring road which will provide easy access from the sides. A position on an important railway will give a desirable advantage, not only in facilities for passenger transfer but in the transportation of the many bulky materials that the aerodrome requires.

So far as its situation in relation to the several parts of the town is concerned, it is obvious that the commercial and industrial districts are the least satisfactory to the aerodrome itself. Smoke, high and densely-packed buildings, factory chimneys, unpredictable air-currents and high land values are all serious handicaps in these districts. The neighbourhood of a residential district is the most desirable situation so far as the aerodrome itself is concerned; but an aerodrome in its neighbourhood is about the most undesirable thing that could happen to a residential district. An aerodrome is not, as it is sometimes regarded as being, a type of open space: it is more akin to an industrial area. It can be very detrimental to the residential values of the territory not merely adjacent to it, but for a large radius, even up to half a mile, around it. The noise of numerous machines in flight or under tests can become an intolerable nuisance: the night lighting that will always be necessary may also be decidedly objectionable. Even the pleasantness of the wide grassy stretches of the landing ground may in the future disappear. Major R. H. S. Meeling, in the paper which has already been quoted, has made this alarming statement—'I have no doubt that one day the whole surface of an air-port will be concreted over, and that time is not so far distant as one might think'. There will be little amenity about an aerodrome when that time comes.

CHAPTER X

URBAN OPEN SPACES

I. GENERALLY

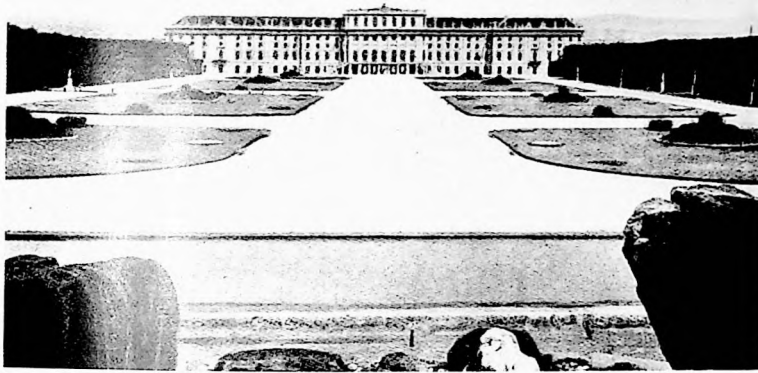
OPEN spaces in urban areas may serve one of two purposes. On the one hand they may enhance amenity: on the other they may provide facilities for the essential recreation of the town's inhabitants.

They enhance or create amenity in a variety of ways. They afford relief against the artificial forms of streets and buildings: they provide dramatic two-dimensional contrast to the three-dimensional character of the town: they add dignity, scale, and emphasis to its important features. In fulfilling these functions they should act upon the civic attributes of the buildings and streets as civic attributes themselves and not as alien, non-civic intrusions. They should afford relief and contrast as one integral part of the civic organism acting upon another. They should be *of the town*: civic, sophisticated, formalized.

In providing for the active recreation of the town's inhabitants, open spaces meet a need, social as well as physical, that has always been felt by urban populations. To-day, in a machine age when a great proportion of the population is engaged in tediously repetitive factory work and in sedentary occupations, when easy methods of mechanical transport discourage personal exertion in locomotion, when ready-made entertainments react against social intercourse, facilities for organized games are more than ever necessary.

The two purposes of urban open spaces cannot satisfactorily be served in a single unit: the one purpose is generally incompatible with the other. Recreation, particularly through such spacious organized games as football, hockey, and cricket, seems inseparable from noise; and a recreation ground is necessarily rather raw and unadorned. Thus recreational open spaces are often destructive of the amenity which it is the function of other open spaces to enhance or create. We must therefore consider the two types separately.

Before doing so, however, it may be as well to remember that though parks and recreation grounds have different functions they are both part of one system—for obviously a town's open spaces should be arranged systematically. It would be absurd, for instance, to place them all in one remote corner of the town, and then to say that all the inhabitants were well provided for. They must be so distributed that all parts of a town are equally well served. They must be definitely related to one another. And, in a large town at any rate, even a perfectly distributed system is not sufficient: a connected system is



'Town Planning in Practice'

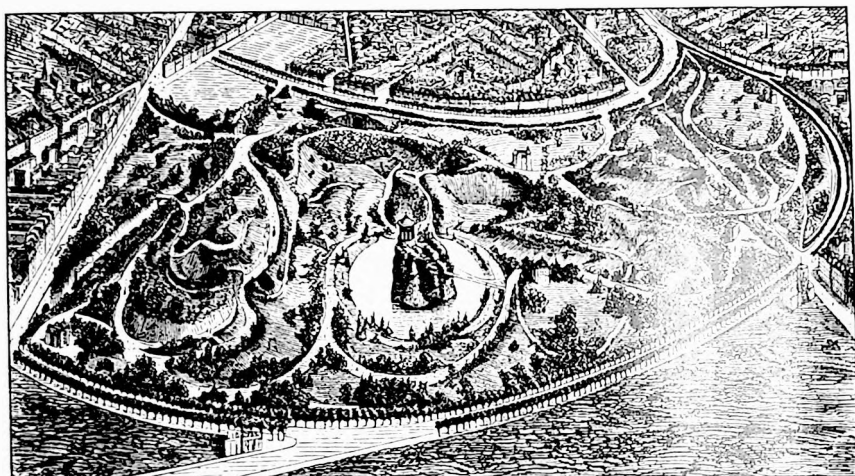
45. SCHLOSSGARTEN, VIENNA



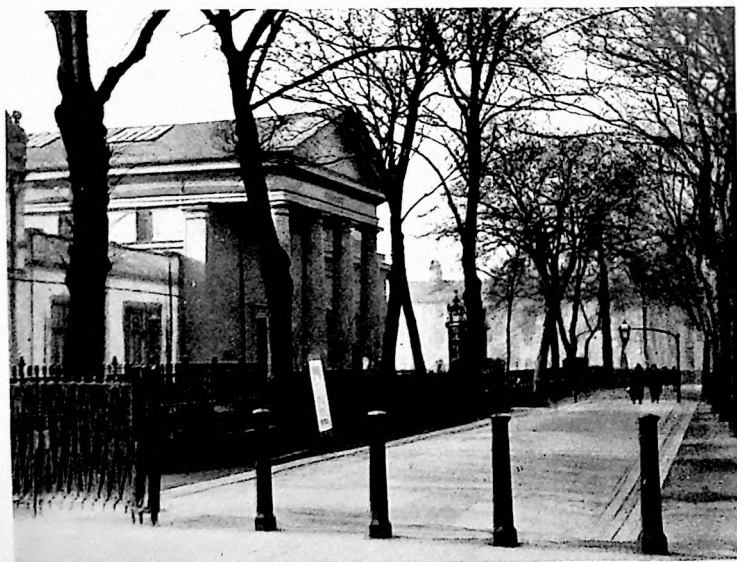
'Town Planning in Practice'

46. WATER GARDEN, CHANTILLY

URBANITY IN SPACE



47. PARC DES BUTTES CHAUMONT, PARIS



48. TOWN PROMENADE, LEICESTER

necessary. We have already pointed out the desirability of having the rural reserves outside a town connected by footpaths. It is as desirable to have the open spaces inside a large town similarly connected. This can be done by laying down tree-lined formal promenades and parkstrips, which will connect the open spaces not only with one another but with the country footpaths that lead out to the country reserves. In a small town these things will not often be required, but in a large town much delight may spring from them and the service of the open spaces may be much enhanced by them.

2. TOWN PARKS AND GARDENS

The non-recreational open spaces of a town include architectural public squares and 'places' (as distinct from mere traffic circuses), and gardens and promenades, as well as town parks.

As we have said, these should be of the town, civic, formalized. It is outside the scope of this book to treat in detail the wide subject of garden and park design, but since we have been so concerned with the desirability of bringing urbanity back to the town and concentrating rurality in the country, the consideration of the *type* of design which is desirable is well within our purpose.

The English small-town park is invariably naturalistic. Who does not know the ten- or twenty-acre Victoria-and-Albert park in which have been 'imitated' all the various pretty bits of a whole county?—the natural 'landscape' paths which, in imitation of 'the reeling road, the rolling road that rambles round the shire', wriggle round a wriggling islanded lake, over a cascade by a rustic bridge, past a grotto, up a little hill to an observation tower, down again to a rose garden, through an old-English garden, an Italian garden, a carpet bedding, past a cast-iron urinal and a palm house, through a sunken glen, out into the dreary informality of an English street. And who does not know the even greater stupidity of the small naturalistic public-gardens (the informal gardens, for example, that have been laid out in the middle of the fine formal London squares) where the wriggling paths, the shrubberies and bulbous flower-beds achieve the final limits of fatuity? And who, knowing these things, has not sighed for the sophistication of some Continental garden or park?—till he remembers that Paris itself has its Buttes-Chaumont.

Long before the French out-Englished the English garden-city in the *cité-jardin* they produced unconscious caricatures of the English landscape garden in the *jardin-anglais*; and, in the Parc des Buttes-Chaumont, the naturalistic style received its most logical application to a site which afforded the fullest scope for all its wildest possibilities.

Here in the eighteen-eighties, £140,000 was spent in creating a miniature mountain kingdom out of an abandoned 40-acre plaster quarry. In the centre of it a craggy rock-and-cement island, crowned with a

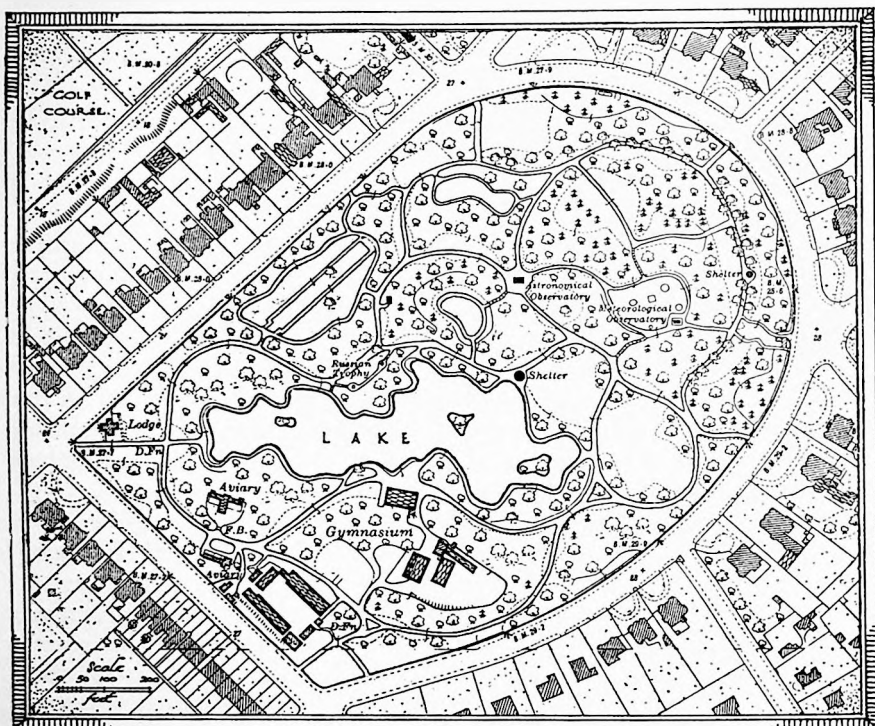


FIG. 31. The incredible English town-park. This typical example of the Victoria and Albert style has an area of 30 acres on a dead level site, and is the one 'park' in a famous health resort of 80,000 population. Adapted from the Ordnance Survey Maps, by permission of the Controller of H.M. Stationery Office.

classical 'rotondo' and ascended by tortuous rock-hewn stairways, rises through sheer cliffs to a height of 160 feet above a little lake. There are caverns and gorges which, as a contemporary Englishman said, 'remind one of some of those in the very top of the Cumberland mountains'. In the surrounding mountain kingdom there are other cliffs and gorges; there are tumbling cascades and romantic grottoes galore; there are rare Alpine flowers growing in concrete rock-gardens; there are pretty shrubberies and plantations dotting gentle slopes. All this on 40 acres in the heart of Paris! All 'natural' and picturesque—like a scenic-railway landscape in a fun-fair!

And that is just the effect, the fun-fair make-believe effect, that naturalistic 'landscaping' must necessarily produce. The artificial cannot reproduce the natural: it can only caricature it. If one thing is certain with regard to town parks, particularly with regard to the smaller parks, it is that the 'natural' style is the most artificial, and that the 'artificial' or formal style is the most natural under urban conditions.

But even if the naturalistic style could be quite perfectly carried out in the perfect replica of a romantic natural scene, what in the name of common sense is the purpose of such a scene in a sensibly-sized town, when miles and miles of the genuine countryside itself are accessible within a few minutes' walk of the town centre. In a great city like London where the country is ten miles or half an hour's journey or more from the centre, an attempt to reproduce a natural landscape in the central parks is excusable and understandable. It is even so in a city like Glasgow or Liverpool or Birmingham where the country may be only five miles, or a quarter of an hour's journey or a threepenny bus fare away. So Hyde Park and Sefton Park and a few others have their justification. But in a reasonably compact town of even so large a population as 150,000, every single member of the community is within about a mile, or a quarter of an hour's walk, or three minutes' motor ride or a penny bus fare, of the country that lies at the town's boundary. Why, then, should anybody make the attempt to imitate that so-close country in miniature, even if the attempt had a possibility of success, which it has not? It is plainly fatuous to do so. Yet it is *invariably* done, and it is likely to continue to be done even when that countryside is made farther accessible by the regional reserves and the country footpaths that we have already discussed, and the last vestige of any reason is thereby stripped away. Such is the flabbiness of the modern romantic.

It is regrettable not only because it fails in the stupid thing that it sets out to do, but because it prevents the achievement of another and most desirable thing: the emphasis, through formality, of the town's urbanity. Sheer urbanness can probably be expressed as well by a properly designed town garden or town park as by the town buildings themselves. Indeed not only can open spaces be kept in character with the town; they can definitely emphasize and heighten it. A perfect harmony of design in buildings and open space is the highest expression of urbanity.

And besides its uses to urbanity, the formality that may be given to natural things has joys and beauties of its own. What an exquisite calm beauty a sheet of formal water can have! Beside the vulgarity of

the usual peddling 'natural' lake its static peace attains to nobility. And how noble, also, may be an avenue of great trees, how lovely a level stretch of greensward, how charming a row of pleached bushes and how restful the geometric clarity of a straight footpath!

A formal lay-out demands certain conditions of the ground, it requires flatness or an even sloping: or it might be more accurate to say that these conditions demand a rigidly formal lay-out. Other conditions demand a somewhat softer treatment, some loosening of the rigidity. Strict formality on a bumpy, undulating site would, unless it was most skilfully designed, be almost as absurd as the consciously picturesque. Nevertheless, even here formality is essential, though of a looser kind, for there can be formality in curves as well as in straight lines.

When a site for a town park is chosen, therefore, it should be chosen because of its adaptability to formality. The site that cannot be developed with some degree of formality has no purpose as an urban open space. The old quarry of the Buttes-Chaumont had better have been used as a refuse dump and filled in. But the crowning sin of urban park design is deliberately to make formality impossible, as Paxton did at Birkenhead where he created artificial hillocks and a lake on a dead level site. That is the unforgivable limit.

3. RECREATIONAL AREAS

Urban recreational open spaces are provided for two types of users; for children and for adults. The provision for these two types should generally be kept separate. The standards which govern their distribution alone will usually require this; but where, as may occasionally happen, it is more convenient that they should not be kept separate, it is at least essential that they should be kept distinct. Children under fourteen years of age should not be subjected to the rough-and-tumble of an area used by grown people: they require playgrounds of their own.

These playgrounds should be equipped with swings, and such playthings, and a sand-pit and perhaps a paddling pool. They should be distributed over a town at intervals of not more than half a mile apart, which means that no child will need to go more than a quarter-mile to reach one, and they should be so situated that children have not to cross any main road to get to their appropriate place. It will sometimes be found that the triangular or awkwardly shaped 'back-lands' which so often occur in the lay-out of estates and which are so difficult of development, will be most convenient for their use.

While children may not reasonably be expected to go more than a

quarter-mile to a playground, adults may be expected to go half a mile. The ideal provision of adult recreation grounds is therefore at intervals of not more than one mile apart. Now recreation grounds are necessarily large; so that when they are situated inside a town they are not only detrimental to the surrounding houses because of their noisiness and bareness, but they have an undesirable effect upon the town: they dilute its density, hinder its concentration, diffuse it over a much larger area than is necessary. When they are surrounded by houses they are also incapable of expansion to meet new demands or changing standards. Consequently it is desirable that they should be situated outside a town, on the edge of the country. Here they will be able to extend as far as may be required at any time, and they will serve their recreative purpose more pleasantly than in the town, for they will be surrounded on at least three sides by the open country instead of by house-backs. And here they will not only avoid damage to the town, by avoiding, even as Wren determined to avoid in his new London, all unnecessary vacuities ('all churchyards, gardens and unnecessary vacuities to be placed out of the town'), they will also render it good service by giving it definite and logical boundaries.

In any reasonably-sized town the recreation grounds beyond the pre-determined boundaries would be well within the limits of the desirable half-mile radius of accessibility. They would be so even in a town of 80,000 or 100,000 or 150,000 inhabitants, as Fig. 33 shows.

So far as large and continually expanding cities are concerned, no such idea can apply. In the matter of playing-fields, as in many other matters, the very large city shows itself to be unmanageable. Here is the position of London (as stated in the First Report of the Greater London Regional Planning Committee)—'Month by month the localities where land (for playing-fields) can still be secured must be looked for farther and farther beyond the reach of Central London. So large is the number of potential players of games in that population that even if adequate provision of open space and playing-field could now be made, the transport facilities required to enable them fully to enjoy those fields would present an almost insoluble traffic problem.' So it is, to a lesser degree, with Manchester, Leeds, and the rest. This difficulty, of course, is one which is inherent in their loose and un-governed character and one with the solution of which we are not concerned here.

Besides these recreation grounds, by which we have meant public grounds which are free to all and access to which is not impaired by the assigning of any parts solely to special clubs and persons, there is in all towns a demand for private playing-fields. A number of large

firms now provide their workers with playing-fields, but more often groups of workers and others form their own athletic clubs and lease suitable pitches for their use. In addition to these there are numbers of clubs which have no fields of their own but hire what pitches they

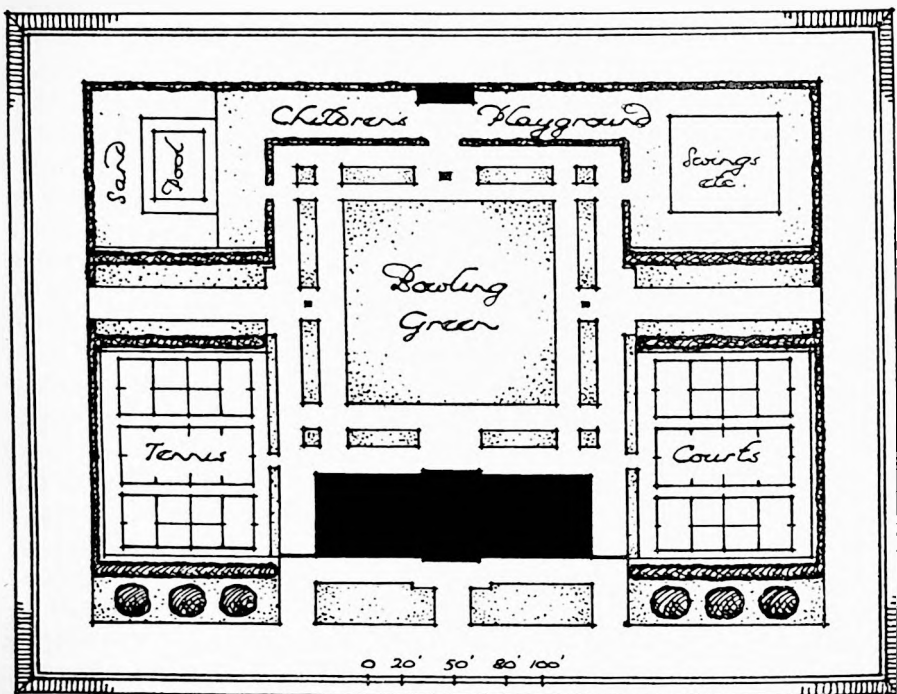


FIG. 32. Neighbourhood centre on an area of 3 acres. The building would contain swimming baths, library, &c., and the central space, though used as bowling green, would serve as part of the formal garden.

can from season to season or from week to week. In many places the demand for these private playing-fields is met by local farmers and landowners. In many more places it is not. The players are private persons, and invariably the local authorities disclaim any responsibility of catering for them. But as the local authorities already have responsibilities towards such private persons as allotment gardeners, so they should have towards these players. It should be the duty of local authorities in areas where there is an unsatisfied demand for playing-fields to provide such fields for the use of bona-fide clubs, charging such rents and fees as may seem desirable. It is a matter of common knowledge that the majority of these athletic clubs continue their existence only with difficulty on account of the scarcity of pitches, but,

given such facilities as these, they and the other clubs that would spring into being could flourish in security.

In England, so far, we have been content to supply recreational facilities only through the public recreation ground. A few children's playgrounds exist (chiefly in the slum districts of large cities) and a very few publicly-owned playing-fields. In America there has been developed, and is much in vogue, an institution-and-open-space combination, called a Neighbourhood Centre, which provides in one unit for numerous small-space athletics and for cultural, educational, and social requirements. These Neighbourhood Centres are sometimes operated in conjunction with schools, but they provide for adult as well as juvenile use. A fully-equipped centre will contain a children's playground, tennis courts, bowling greens, open-air gymnasiums for both sexes, and a swimming-pool, all grouped around a building which incorporates a library, reading-rooms, an instructional centre, a kindergarten, a concert hall, a theatre, billiard rooms, and so on.

It is strange that this inspiring ideal has never been generally adopted in England. Every American town now has its Neighbourhood Centres (located at intervals of every mile or so), and they are both highly popular and extremely serviceable institutions. They are equally adaptable to large cities and small towns or even villages.

4. STANDARDS OF PROVISION

It is obviously desirable, if towns are to be provided with proper open space facilities, that some generally acceptable principles and standards of provision should, if possible, be scientifically determined. Otherwise the provision will have to be by guesswork. Such standards would not, of course, be rigidly applied without any variation to every type of town. Different towns have different needs according to their differing characters and populations. But it is natural to think that there must be a minimum standard which applies to the basic requirements of every urban community.

This, unfortunately, after over twenty years of town-planning practice, has not yet been determined, nor does it seem likely to be determined. Each of the many town-planning and sociological authorities who have considered the question has determined a standard of his own, and each one's standard differs from every other. At the risk of tediousness we will look at some of these standards.

First of all with regard to town parks and gardens. Here we have several recommended standards determined on two quite different bases. The Regional Plan of New York and its Environs (1928) recommends an absolute minimum of 1 acre per 1,000 inhabitants, and a

desirable minimum of 1 acre per 600 inhabitants for areas in such a stage of development that the ultimate total population may be fairly accurately determined; while for undeveloped areas where the density of population is not likely to exceed 30-50 persons per acre it recommends a provision on the definite basis of 5 per cent. of the total area of the town being reserved for parks. The Regional Plan for Greater London (1930) recommends 10 per cent., or twice as much. The National Playing-fields Association recommends 1 acre per 1,000 population, while Professor Abercrombie and many other private experts recommend 2 acres. A good compromise will get an average standard of about $1\frac{1}{2}$ acres per 1,000 population from these varying standards. And that is the desired standard of New York, which has had actual experience of the country reserves that we may some day have here: an experience which must be reckoned with, for the country reserves are bound to lessen the necessity for these town parks. For cities, then, this standard of from 1 to $1\frac{1}{2}$ acres per 1,000 inhabitants seems reasonably high. For smaller towns the standard may be much less. In the theoretic town of 150,000 inhabitants which we have already mentioned, the formal town parks required under this standard would total 225 acres, which is obviously excessive for a town where every inhabitant is within a mile of the open country. A quarter of that or even less would be sufficient.

The standards for the provision of recreational areas are even more unsettled and various. Only on the standard for Children's Playgrounds is there any agreement in England, and that agreed standard is obviously excessive. The English standard is of playgrounds of 2 acres serving areas within a radius of a $\frac{1}{4}$ -mile of each playground. This has been calculated as follows: approximately a quarter of the population is composed of children up to 14 years of age: approximately 50 square feet of playground is needed for each child: reckoning then on a density of 50 persons or $12\frac{1}{2}$ children per acre, the area required to serve the district within a $\frac{1}{4}$ -mile radius is about 2 acres, or, in figures of total population, one-third of an acre is required per 1,000 population. This figure, it will be noticed, allows for the whole of the population under 14 playing at one and the same time—a thing which could not happen save by a miracle, because numbers of that population would be unweaned babes-in-arms. It is extremely unlikely that all out-of-arms would wish to play simultaneously. So in any case the standard is excessive. But when allowance is for the provision of playgrounds that the Board of Education now requires of local education authorities, an allowance of at least 2 acres per 100 secondary school scholars and 1 acre per 100 elementary school children, the standard

becomes grossly excessive. It could reasonably be halved or quartered. A more reasonable standard is that adopted by the New York Regional

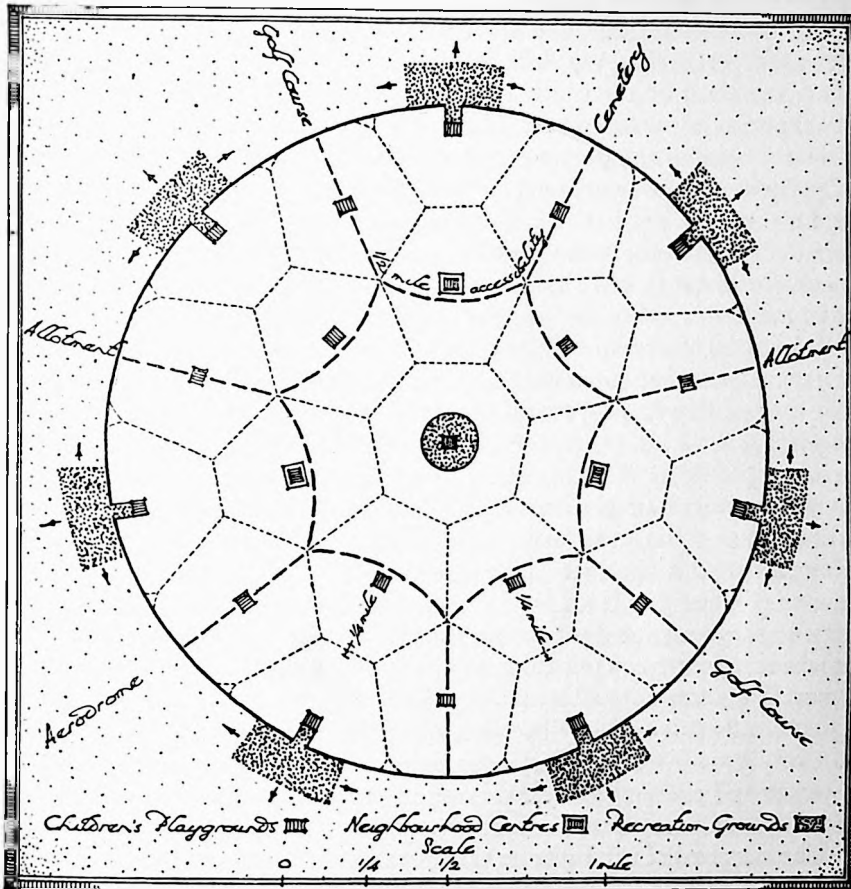


FIG. 33. Theoretic scheme for distribution of recreational open spaces in a town one mile in diameter capable of housing a population of between 100,000 and 150,000 inhabitants. A central recreation ground would provide for the central inhabitants; recreation grounds on the town boundary, where they might extend as required, would provide for the majority of the population who would still be within half a mile of them. The $\frac{1}{4}$ mile accessibility areas for recreation grounds are shown by strong broken lines. The $\frac{1}{2}$ mile accessibility areas for children's playgrounds are shown by thin dotted lines.

Plan, which, though it allows double the unit of playing space—i.e. 100 square feet per child instead of the English 50 square feet—requires only half as much total area because it provides for only a quarter of the population between 5 and 15 playing at the same time.

It is obvious, therefore, that the standard provision of children's playgrounds should be reduced from 2-acre plots per $\frac{1}{4}$ -mile radius to plots of 1 acre or less.

The most widely differing standards, however, are those for public recreation grounds. We will leave aside the New York Regional Plan's standard of 1 acre per 1,000 inhabitants for *all* public recreational purposes (including children's playgrounds and Neighbourhood Centres) because the games for which that standard provides are not so spacious as are our national games—though it is a pity to have to do so, for the New York standards seem much more modest and reasonable than the standards set up for us in England. It is something of a shock, for instance, after noticing their standard of 1 acre per 1,000 inhabitants, to come to the Greater London Region's standard of 4 acres of public *plus* 3 acres of private and semi-public playing-fields—a total of 7 acres per 1,000 inhabitants. (And it should be noticed in passing that the London Region's total of open-space standards means that, at 45 persons per acre, practically one-third of a town's total area should be playing-fields!) This standard of 7 acres of playing-fields is based on the standard of the National Playing-fields Association and is arrived at as follows: in every 1,000 of the population there are 500 persons between the ages of 10 and 40 who are potential players of games: of these 500 it may be assumed that 150 (at the most) do not want to play and that for various reasons a further 150 require *private* provision, leaving 200 per 1,000 inhabitants for *public* provision: which means that 3 acres of private and 4 of public playing-fields are required. This standard, it will be observed, allows for over one-third (350 out of every 1,000) of the total population, males and females, grandmothers and suckling babes, playing at absolutely the same time—an incredibly fantastic proposition.

The standard of the Juvenile Organization is much more reasonable. This organization is concerned only with persons between 14 and 25 (but the number of persons who play football and hockey after 25 must be very small), and it bases its requirements on the calculation that 200 persons are between those ages and that only 1 in 4 of these requires facilities, or, in other words, that provision need only be made for 50 players per 1,000 inhabitants, or 1 in 20 of the population. This is indeed modest in comparison with the London provision for 350 per 1,000 inhabitants, but its modesty is halved by an allowance of 1 acre per 20 players as against the London allowance of 1 acre per 50 players, and its total requirements amount to $2\frac{1}{2}$ acres per 1,000 of the population (though it would only be $1\frac{1}{4}$ acres on the London space unit) against the London requirement of 7 acres.

There are other standards which we will not trouble to quote. These two are sufficient to show the confusion that exists in this Battle of the Standard. The confusion can still better be shown, perhaps, by a transference of the assumptions in each case. Thus the London assumption of 1 acre per 50 players applied to the Juvenile Organization standard of 50 persons playing out of every 1,000 inhabitants gives a requirement of 1 acre per 1,000 population; while the Juvenile Organization assumption of 1 acre per 20 players applied to the London standard of 350 persons playing per 1,000 inhabitants, gives a requirement of 17.5 acres per 1,000 of the population. One requirement 17.5 times the other! A truly remarkable state of confusion!

In face of all these conflicting standards, what is the designer of a town-plan to do? To 'choose his fancy'? To emulate the lady backers of racehorses and prick blindly with a pin? To strike the average of them all? Or, to add still one more standard—his own?

But, in point of fact, it is impossible on these lines to ascertain the requirements scientifically. To *estimate* the number of persons requiring facilities for organized games, without taking a thorough census, is, frankly, to *guess* it. Yet that number is the key to the whole problem of the recreational areas.

Here again the sensibly-planned town of pre-determined limits has definite advantages. It would suffer no difficulties from the absence of an accurate standard of recreational areas. Outside the pre-determined limits of development, surrounded by open country, its playing-fields could extend or contract as the demands necessitated.

In the large uncontrolled cities, there is here, as in many other matters, confusion made ever worse confounded. Here the Battle of the Standard will have to be fought out, but on more scientific lines than it hitherto has been.

5. INCIDENTAL OPEN SPACES

There are one or two other incidental urban open spaces which must be briefly considered. They are all 'unnecessary vacuities to be placed out of the town'.

There are Cemeteries, for instance. Whatever may be the numerous advantages of cremation, religious beliefs and superstitious fears are likely to continue the practice of the burial of the dead. That being so we shall have to tolerate around our towns the melancholy spectacle of cemeteries.

Nowadays ninety-nine out of every hundred of them are a disgrace to the living and an insult to the dead. Their arid ugliness is an affront

to the least sensitive eye. If we have got to tolerate them in principle, at least we need not tolerate them as they are to-day. But that they need not be what they almost universally are, a few examples, such as that at Inverness, sufficiently prove.

The first essential is that they should not be obtrusively sited. There are extensive cemeteries on the hill-sides of south London that are frightfully visible for miles, their thick forests of white marble crosses glittering in the sun. A second essential is that they should be heavily screened by trees. And a third and perhaps the chief essential is that there should be a complete prohibition of the meretricious grave ornaments and memorials that are now universal. Through the observance of these essentials a cemetery might be a place of quietness and beauty.

Besides the larger public cemeteries there exist in most towns many small disused graveyards. These can be converted into pleasant and quiet gardens in whose character there is no violation of the site's ancient dedication. For these graveyards at any rate there is little excuse to-day. We want space and beauty for the living: we cannot allow our towns to be cluttered up with the tombstones of the hundred-years dead.

Then there are Allotment Gardens. If there is one other urban open space that may be mentioned along with the cemetery, it is this. Its fantastic dreariness, untidiness, and squalidity would incline one to advocate its abolition were it not obvious that these conditions are not its inevitable but rather its accidental accompaniments; and were it not indisputable that the cultivation of an allotment garden is a profitable and recreational exercise for which a town dweller has a right to expect facilities to be afforded him. How the primitive abandonment of dilapidated bacon-and-orange-box hen-pens and tool-sheds can still be tolerated in and around nearly every town in the kingdom is an amazing thing when it is considered how easy it would be to arrange an orderly and systematic lay-out. But this is only one more example of the slatternliness that is so characteristic of much of our modern life. If we had any true decency and pride we would not tolerate this sort of thing for a single day.

Then there are Golf Courses. These are definitely things of beauty: each is a kind of specialized park with a varying colour scheme and texture in the yellow sand of bunkers and the contrasts of well-kept greens, middling fairways and natural roughs, that give it a special charm and attraction. Situated immediately outside a town, visible from one or more of the main approaches, it can be a very great asset to amenity.

And finally there are Aerodromes. These are sometimes regarded as amenity-giving open spaces. But they are not, or ultimately will not be. As we have seen, they may eventually be covered with concrete; they will certainly be murderous with noise and will have great buildings and workshops about and upon them. As such they will be as unlikely to give amenity as a sewage works or a railway siding.

CONCLUSION

'There is a danger that one day in the not very distant future we shall be confronted with an obituary notice writ in large and monstrous letters across the whole breadth of England—"Here lies the art of Civic Design. It was killed by the *Science* of Town Planning". '—A. TRYSTAN EDWARDS, *Good and Bad Manners in Architecture*.

CHAPTER XI

IS THERE ANY HOPE?

I. FALSE VALUES

WE have now examined the principal aspects of modern development in town and countryside. We have attempted to analyse present tendencies in the light both of past developments and of theoretic basic principles. What in the long run has emerged?

One thing seems certainly to have emerged. On almost every aspect that we have examined, modern values have been seen to be completely false and modern ideals hopelessly flabby. In the countryside a few beauty-spots and landscapes of abnormal character are preferred to the pure individual beauty of the normal English landscape, and, largely because of this false value, that normal landscape is being debased. It is being debased partly through lack of maintenance of its existing features, but chiefly through new developments that are undertaken either in imitation of supposed traditions or without any care for tradition, supposed or otherwise; by scattered and spasmodic buildings in detachment or semi-detachment in imitation of a completely false notion of traditional country buildings on the one hand, and by great roads that are made and alined for traffic that has no real need of either their uniform widths or their untraditional alinements, and by mechanical and unassimilable developments like electricity transmission lines, on the other hand. In the town, also, values are altogether corrupted, and a hermaphroditic neutralness is preferred to the pure individual beauty of the true town character. Civic expression is being neutralized by country cottage architecture of the same false tradition as that which debases the countryside. The scale and dignity of the town is being ruined, and its bulk is being increased, by a chronic diffusion through the vacuities of great house gardens, unnecessarily wide roads, and too vast and wrongly sited open spaces.

In the countryside, activities under these false values and flabby ideals flourish unrestrained by authority. In the town they flourish under and are encouraged by authority—which indeed established them.

2. AUTOCRACY AND DEMOCRACY

Any collectively-created thing can achieve beauty, or the status of a work of art, only where there is in the collective creating mind a unity of outlook which has been determined and inspired by an imaginative understanding of the purpose and possibilities of the thing in course

of creation. In the creation of a town or a landscape, this unity of outlook may be enforced from without by some autocratic control, or it may happen of itself through a clear common inspiration, through the spirit of the age. Whether the unity of outlook is enforced or natural, however, it must, if its expression is to attain beauty, spring from a true understanding of the character of the medium upon which it is brought to bear.

Wherever, in the past, town and country have come to a full beauty, they have done so through some degree or other of enlightened autocratic control (enlightened, that is, in this one business of the creation of beauty, though not necessarily in any other). In the one matter, in the creation of civic beauty, England has generally failed where most other countries have often succeeded; but in the other matter, in the creation of landscape beauty, she has universally succeeded where others have almost universally failed.

All the great schemes of city building on the continent of Europe wherein civic building has attained its highest modern expression, were carried out by some form or other of a tyranny which imposed its will, its singleness of outlook on the individual members of the community. In England no such tyranny has ever been active in the cities, and civic beauty has hardly ever found full expression, and town-building has fallen lower and lower as democracy has advanced. On the other hand, in England some degree of autocracy, under the great landowners and promoters of inclosure schemes, was active in the countryside at the time of its moulding through human handiwork, and, inspired by a singleness of purpose in the creation of rural beauty, and guided by an understanding of the possibilities of the landscape as a work of art, it imposed its will upon the individual members of the community: whereas on the Continent, though a perhaps greater autocracy existed, it was in this matter unenlightened; it was not inspired by an ideal of rural beauty nor guided by an understanding of the principles of its creation, and therefore the landscape there has never attained a beauty with a human relationship.

But the autocracy that created the beauty of rural England has now been largely destroyed and democracy has replaced it. Under this democracy there is some direct action by established central authority (as in the making of roads, the erection of electricity transmission paraphernalia, &c.), but much of the activity concerned with developments in the landscape is quite uncontrolled from the aesthetic point of view. Both the central and the individual activities are completely unenlightened. Democracy is at present reducing the English countryside from the beauty which it attained under autocracy.

This state of affairs has led to a belief, among many students of the question, that democracy is incapable of the production or even the maintenance of beauty. But that does not necessarily follow. The New Town of Edinburgh, and eighteenth-century Bath, the only perfect large-scale expressions of civic building in Great Britain, may indeed be said to have been created on little islands of autocracy in a vast ocean of democracy; but everywhere in the eighteenth and early nineteenth centuries English towns did attain to some degree of beauty—not a completely unified, symphonic beauty, but at least a collective harmony of individual expression. They did so because, though there was no compulsion, there was a unity of outlook among the collective creators, and because the spirit of the age understood the possibilities of the town-medium as a separate work of art. Here were the fruits of an enlightened, inwardly-unified, but outwardly-uncontrolled democracy.

But if the achievements of this period of English democracy are such as encourage the hope that civic beauty may yet be created without enlightened autocracy, the subsequent history of the town is sufficiently mournful to dissipate that hope. With the development of the industrial revolution, while the lack of autocratic control and direction continued, the unity of outlook and the appreciation of civic expression completely failed. Under that condition of affairs the town fell from its status as a work of art, beauty departed, and conflict of purpose produced the thing of chaotic disorder and non-beauty which was the Victorian town. Here were the fruits of democracy both unenlightened and uncontrolled.

And now to-day we have yet another condition, the exact reversal of that which existed in the eighteenth century. Still we have not attained beauty in our towns. We have no feeling for civic expression; no appreciation of town-character; no understanding of the possibilities of the town-medium. So, still, we have the chaotic disorder and non-beauty, of a different type but to a similar degree, that the Victorians had. Here are the fruits of democracy controlled by unenlightened authority.

The questions for the future are therefore: (1) Can we ever again attain the unity of outlook which will enable us, uncontrolled, to create beauty in town and countryside? and (2) Can we hope that the control from authority which seems a settled part of modern democracy can ever become enlightened?

3. ENLIGHTENED AND UNENLIGHTENED CONTROL

There is very little likelihood of the multitudinous inhabitants of modern England ever reaching the unity of outlook, the common

inspiration, that once gave us beauty and urbanity in our towns. The only way we are likely to attain any beautiful civic expression is by stringent but enlightened control from authority. And the only way we are likely to maintain and extend the rural beauty that we have inherited is also by enlightened control.

There is no doubt that considerable control does to-day exist and there is no doubt that it is most dreadfully misdirected. The Town Planning Act of 1925 (which consolidated earlier Acts of 1909, 1919, and 1921) has been the instrument of control and it has been exercised by the local authorities, under the guidance of the officials of the Ministry of Health. Under it hundreds of thousands of acres of land have been planned 'with the general object of securing proper sanitary conditions, amenity and convenience'. We have seen what this 'planning' consists of. It is aimed only at the establishment of those loose garden-city ideals, that disorderly open-development practice, which is the antithesis of genuine civic design. The Acts themselves arose out of those ideals, they were sponsored by the reformers who advocated them. The two basic Acts of 1909 and 1919 were, indeed, but minor sections of Acts for the Housing of the Working Classes. They were prompted by sociological, not artistic, ideals—and chronically flabby sociological ideals at that. They have nothing to do with the creation of civic beauty.

The *Art* of Civic Design has been killed by the *Science* of Town Planning, says Mr. Trystan Edwards. But modern town-planning is hardly more a science than it is an art. Science suggests some basis in reality. Town-planning has practically none. Only too often it is nothing but stupid guesswork prompted by prejudice and inspired by sickening clap-trap.

Not only is it not *town*-planning, it is the negation of any planning at all. The Acts, arising as they did out of the pre-modern-transport age, were intended to apply to the suburban areas of towns, to 'land which is in the course of development or appears likely to be used for building purposes'. But now, since motor-cars and wide roads make building possible and likely anywhere, *all* the land in the country can be regarded as building land and consequently *all* the land in the country is being laid out as a gigantic building estate to be developed at a density not more than 12 houses per acre. On paper, London already covers the whole of Kent, Surrey, Sussex, Middlesex, Buckinghamshire, Hertfordshire, and Essex, and it is only a matter of time before, on the same paper, it will be linked up to Newcastle and Plymouth, with a beauty-spot preserved here and there, and here and there a hundred or two acres reserved as an agricultural area. A whole county

is zoned at one fell swoop for houses at 1 per acre. The population of all the Russias could easily be housed on the areas now zoned for building in England. Actual figures are not available. If they were they would make humorous reading in Bedlam. But approximate figures will do. On the 31st of March 1931, some 6,846,036 acres of land were subject to statutory town-planning control—and there were millions more subject to advisory schemes. The average allocation of areas for housing purposes in these statutory schemes is about 67.5 per cent. of the total area, the remainder being allocated for roads, industries, open spaces, &c. That means that about 4,586,820 acres have been, or are in the course of being, zoned for housing. The majority of this area is zoned at 12 houses per acre: allowing for the areas zoned at a lower density, the average density of population per acre will not, then, be less than 40 over the whole housing area. The amount of *additional* population that could be accommodated on the new 'planned' area is therefore 183,000,000—more than four times the present population of the whole country. And only a fifth of the country has been 'planned'. And this at a time when the population has become practically stationary! It sounds too fantastically idiotic for belief. But there it is. Town-planners maintain that they must look well ahead. They are looking a thousand years ahead. They have their heads so high in the peculiarly dense clouds of their ideals, that they cannot see the horrible mess that their hands are making of the earth beneath. If their schemes can be classified as 'planning', words no longer have any meaning.

One of the most pitifully comic tragedies is the way in which lovers of rural England have been led to believe that the Town Planning Act under which these things are done is the means of the preservation of the countryside.

These stupidities arise out of the shortcomings of the Act itself. What of the shortcomings of the authorities that administer the Act and exercise control under it? It is a hopeless tale of dreary inadequacy. Perhaps ten per cent. of our local authorities may be worthy of having such control entrusted to them: the remaining 90 per cent. are quite pathetically unworthy in their blind and fumbling incompetence. And it is hardly their fault. What constructive contribution can the average town-councillor whom we know make towards a scheme for the development of a complete town? It is obviously unfair to ask him to make any. This is no routine matter like cleaning streets or erecting urinals. What hope can there be here of enlightened authority?

And what of the 'experts' who guide them? Have the older experts ever exercised independent thought since they listened to Ebenezer

Howard? Have the younger ones ever exercised independent thought at all? It is difficult to believe that they have.

The tragedy of it all is that never before in England has there been such a degree of control. Never before has there been such opportunity for *town-building*. In 12 years, 985,000 houses have been built with state financial assistance, more than half of them by local authorities. Here was absolute control by authority, greater opportunity than ever any Continental autocrat had. And look at what it has given us!—Wembleys, Norris Greens, Sloughs! During those 12 years 334,000 dwellings have been built in Greater London alone—at a time when London is already overwhelmed by size. Enough buildings for 45 satellite towns of 30,000 population, 26 towns of 50,000 population, 12 or 13 towns of 100,000 population. And not a satellite town has been built.

It is impossible to convey the sense of frustration that present town-planning arouses in those who know it in its working and who care for beauty or even for mere order and efficiency. We have looked in detail at some aspects of that planning: there are other aspects on which could be cited an infinity of dreary and trivial details. But by their fruits ye shall know them; and the fruits of the Town-Planning Acts of 1909, 1919, 1921, and 1925, as exercised by the local authorities under the Ministry of Health, are surely sufficiently widespread, sufficiently obvious and sufficiently disastrous for one to cry dogmatically that never in town or countryside will any beauty come from such a source.

That control is pitifully unenlightened: fresh control is needed. It is here in the Town and Country Planning Bill of 1932. But there is little more enlightenment about it than there is about the old. So far as town-planning goes, that Bill as it now stands, and as it is certain to be administered by the officials of the Ministry of Health, merely consolidates the open-development practice of the last thirty years and extends a vaguely modified form of it to where it could not legally be enforced before, to the very centres of existing towns. It makes Civic Design impossible: it officially recognizes the 'garden-city (including garden-suburb or garden-village)' as the pre-eminently desirable method of town-building (for it was sponsored by the persuasive publicists of the garden-city idea) and it holds out special inducements to public bodies to develop their land on garden-city lines; but it makes no recognition of the satellite town. Its bias is towards 'amenity' through low-density zoning, semi-detachment, front gardens, and all the rest; and town-planning amenity has nothing to do with beauty. The old amenity-loving district councillors, Howardian

experts, and Ministry of Health are to continue to be the enforcers of the control that the Bill provides for. As regards any possibility under it of Civic Design, the Town and Country Planning Bill is sterile from the beginning.

As regards Landscape Design, it is a little, but a very little, more hopeful. It does at least, and for the first time, take cognizance of the fact that the countryside cannot be preserved by zoning it for housing. And that is an immense leap forward! It officially recognizes that the great difficulty in prohibiting these developments arises from the proposition that every square inch of the surface of England is building land upon which, if development is prohibited, compensation is payable by the public against the owner's loss of potential gain. It provides machinery for overcoming that proposition. (And here may be interpolated the opinion that it is most unlikely that real control will ever be established over country developments except through the national ownership of the land. But of what use would such ownership be at present when central authority itself is so dismally unenlightened?) The machinery thus set up may or may not be workable, but from the beginning it seems unlikely to be used at all, or, if used, used efficiently, for the pivot upon which that machinery operates is the Ministry of Health, and the persons who are expected to set the machinery in operation are rural district and county councillors. What in the name of common sense has the Ministry of *Health* got to do with Landscape Design? What more than the Ministries of Transport, and Agriculture and Fisheries? And what records have any of those Ministries to show their interest in rural beauty? The Ministry of Health has sponsored a few rural housing schemes that seem to have been snatched out of the town suburbs, has sanctioned the foul refuse dumps by which large cities have made whole country parishes uninhabitable—that is all. The Ministry of Transport has sponsored the red-hot pokers of the arterial roads and the delicate tracery of the electricity transmission systems—surely enough. And the Ministry of Agriculture and Fisheries has sponsored the river-polluting, death-dealing rural industries and the poultry-farms that are not brightly neat—again surely sufficient. Can any of these be regarded as the enlightened authority that will maintain the old and give us the new rural beauty?

And as for the rural district councillors: can they be regarded as enlightened executives of authority? They cannot. And the county councillors? They never yet had control of any country development except roads and small-holdings; at least there are some aspects on which they have a chance of showing their mettle. But see the line

they take. Do they appoint a new Committee and a new Department to deal with their planning responsibilities? They do not. Their Roads and Bridges Committees and their Roads and Bridges Surveyors, fresh from the glories of creating their rural roads, take over the work as a side-line.

This Town and Country Planning Bill *may* be a workable instrument for the preservation of the countryside and for Landscape Design; but its powers will need to be wielded by different authorities from those to whom they are at present entrusted. It is obvious that the central governmental controlling agency should not be any one of those Ministries which are themselves charged with some particular type of development in the countryside. It should be some independent body, some central Rural Development Board, or Board of Scenery, which will exercise a proper guidance over the usual activities of the existing Ministries. Nor should the local controlling agencies be such as are themselves charged with possibly corrupting undertakings, as are the rural district councils and the county councils. They should be representatives of the central Board of Development or what not: distinguished laymen perhaps, with a staff of professional experts—(what a job for artists and poets!—how delightful to imagine Mr. Edmund Blunden, for instance, as Warden of Rural Kent!). But whatever central controlling Board it is, and whatever local controlling agencies they are, they will have to be more enlightened than the present governmental departments and the local authorities if they are to preserve for dull democracy that rural beauty which was created by enlightened autocracy.

As for the enlightened control which we have postulated as being necessary for the achievement of civic beauty, a few more years will roll and a good few more seasons pass before that becomes even a hope.

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